Oil, Paint and Drug Reporter

IN TWO PARTS
100 William St.
New York

The Market Authority Since 1871
In Chemicals—Dyestuffs—Drugs—Paints—Oils—Fertilizers

PART I
Vol. 104. No. 12
September 17, 1923

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Oil, Paint and Drug Reporter

The Market Authority Since 1871
In Chemicals—Dyestuffs—Drugs—Paints—Oils—Fertilizers

Vol. 104. No. 12 September 17, 1923

Entered as second-class matter, January 15, 1884, at the Postoffice at New York, New York, under the act of March 3, 1879.

Published Weekly by Oil, Paint and Drug Reporter, Inc., 100 William St., New York—Mailed Saturday; Dated Monday.
Subscription Terms:—United States, $5.00; Canada, $7.00; Other Foreign Countries, $10.00. Payable in advance.
Display Advertising Rates Furnished Upon Application. Classified Advertising Rates, see page 85
Closing Dates—Display Advertisements, Thursday noon; Classified Advertisements, Friday noon

Table of Contents

Late Market Developments 2
Wholesale Prices Current 3, 4, 5, 6, 8, 10
Buyers and Sellers Ready Reference 13

Editorials:—
Avoid the Coal-Tar Crowd 17
Business Passes the Summer Well 17
New Incentives in Chemistry 17
What Will the Verdict Be? 18

Obituaries:—
Campbell, John R. 18
Haskell, J. Amory 18
Signer, Fred E. 18

Analysis of Market Trends ... 44F, 54
News Briefs 18, 32, 36, 54, 78
Where You Can Sell 21

Markets:—

Botanical Drugs 55
Balsams 55
Barks 55
Beans 56
Berries 56
Flowers 56
Herbs and Leaves 56
Roots 71
Seeds 71
Spices 71

Coal-Tar Products 73
Acids 74
Basic Products 73
Intermediates 74

Cottonseed, Cake, Meal and Oil 35
Cottonseed Oil 35
Chicago 36
Hull 36
Dallas 2
Seattle 36
Cottonseed Cake and Meal 35
Atlanta 35

Drugs and Fine Chemicals 51

Dyestuffs and Tanstuffs 77
Chemicals 77
Dyewoods 78
Extracts 78
Natural Dyestuffs 77

Essential Oils 57

Fertilizer Materials 47
Atlanta 48
Baltimore 48
Chicago 58
Seattle 58
Nitrogen Fertilizers 47
Phosphates 48
Potashes 48
Pyrites 48

Flaxseed and Linseed Oil 33
Flaxseed 33
Antwerp 34
Buenos Aires 33
Duluth 33
Hull 34
Indian Exports 34
London 34
Minneapolis 33
Winnipeg 33
Flaxseed, Cake and Meal 34
Chicago 34
Minneapolis 34
Linseed Oil 34
Antwerp 34
Chicago 34
London 34
Minneapolis 34

Gums and Waxes 59
Gums 59
Shellac 60
Calcutta 60
London 60
Waxes 59

Industrial and Oil Securities 61
Financial Notes 61
Oil Securities 61

Industrial Chemicals 63
Acids 69
Philadelphia 70

Miscellaneous Oils 37
Animal Oils 49
Copra 39
San Francisco 39
Seattle 39
Fatty Acids 39
Chicago 39
Fish Oils 49
Chicago 86
London 86
Seattle 86
Grease, Lard, Stearin and Tallow 49
Chicago 49
Liverpool 49
London 49
Vegetable Oils 37
Chicago 38
San Francisco 39
Seattle 39

Naval Stores 31
Rosin 31
Chicago 32
Jacksonville 32
Liverpool 32
London 32
Savannah 32
Turpentine 31
Chicago 31
England 31
Jacksonville 31
Savannah 31
Other Naval Stores 32

Paint and Varnish Materials 23
Colors in Oil 27
Driers 27
Dry Colors 25
Glues 29
Gold and Other Leaf 27
Lead and Zinc 23
Other Paint Materials 27
Pigments 23
Varnish Gums 27
Window Glass 29

Petroleum and Its Products 41
Crude Oil 41
Imports 43
Price Changes This Year 43
Prices at Wells 44A
Production 43
Chicago 49
New Orleans 49
Pipeline Reports 44C
Refined Products 44A
Gasoline and Naphtha 44A
Gas and Fuel Oils 44A
Kerosene 44A
Lubricating Oils 44C
Petrolatums 44C
Waxes 44C
Tank Wagon and Service Station Prices 79
Tulsa 49

Professional Cards 14
Business Opportunities: Classified Advertisements 85
Alphabetical Index to Advertisements 87

Petroleum Gossip 44E

Imports-Exports:—
Imports Entered for Consumption at New York, Week Ended September 14 .. 81
Imports at New York in Transit 82
Baltimore Imports 82
Boston Imports 82
Imports at Boston in Transit 83
Philadelphia Imports 83
San Francisco Imports 83
Containers Returned 83
Recent Charters 83

Bids and Awards:—
Bids Wanted 78

News Articles:—
Atlanta Paint Club Elects Delegates 19
Alexander & Co., G. S., Bankrupt 58
American Cotton Oil Co. Becomes Gold Dust Corpn. .. 36
Boll Weevil Meeting Postponed 36
Boston Paint Golfers Play at Chestnut Hill 19
Chicago Convention Golf Course 29
Cox, Aspden & Fletcher Get Mysore Sandalwood Oil Agency 58
Chemistry Prizes Are Announced at Meeting 20
Chemical Salesmen's Dinner Speakers 20
Cincinnati Paint Club Golf Match 83
Cuban Port Bill Violation of U.S. Rights 19
Detroit White Lead Works Conference 29
Flavor Makers' Committee Discusses Proposed Laws. 61
Federal Wholesale Druggists' Convention in Toronto. 54
French Chemical Trade Calm 70
France to Get Third Share in German Chemical Industries 19
Gorgas Power Plant Sale or Removal 58
Japanese Relief Contributions 21
Massachusetts Probes Gasoline 44C
Medical Supplies Bought in Japan 21
N. P. A. Meeting This Week 83
New York Paint, Oil and Varnish Club Meets 20
Nitrate Investigators Differ as to a Trust 20
O'Neil Succeeded by Moody in Prairie Oil & Gas 49
Oil-Burning Equipment Makers Form Association 49
Proprietary Association Moves 61
Paint Clubs Plan Special Train for Chicago 18
Petroleum Exports in June, Detailed 44D
Priestley Medal to Dr. Ira Remsen 70
Synthetics Makers to Meet 34
Sodium Nitrite Manufacturer for Increase in Tariff. 19
Tampa Dealer Denies Gasoline Conspiracy 44C
Utah Hydrocarbons Studied 44C
Waldo Has New Color Factory 29
Wood Products Output in July 61

Late Market Developments

Dallas Cottonseed Oil Market

DALLAS, Tex., Sept. 14, 1923.

Prompt and September crude cottonseed oil, 10c. per pound. Some sales first half October at 10c. Cracked cake and meal offered for September shipment at $39.50 per ton and for October-November-December at $39. No sales. Ten to twelve mill run linters, 5¾c. to 7c.; first cut 10c. bid, 11c. asked; second cut, 5½c. asked; no bids. General market quiet with mills awaiting further developments.

Drug Market

Shellac at Calcutta was quoted, for spot, 145 rupees, equivalent to 57½c. per pound c. & f. New York; October, 147 rupees, or 58.3c., per pound c. & f. New York. Spot T. N. was 62c. to 63c. per pound with the importers, but small lots from second hands were said to be available at 59c. per pound. D. C. and V. S. O. in one quarter were quoted 80c. to 82c. per pound; diamond I, 76c. to 78c. per pound.

Menthol was generally quoted $17 to $18 per pound, but some believed that $16.50 per pound was possible. The market was dull as to demand.

Castor oil was firmer at 13½c. per pound for medicinal oil in barrels.

Nitrate of silver was noted at 43⅝c. to 44⅜c. per ounce.

London Closing Cable

LONDON, Sept. 14, 1923.

The London market, as cabled by the Reporter's London correspondent, closed at the following positions:—

	This week. s.	d.	Last week. s.	d.
Menthol	75	0	90	0
Morphine	10	6	9	6
Codeine	15	9	14	9
Cocaine	16	9	..	..
Peppermint oil	15	0	14	0
Camphor, crude	3	3	3	6
slabs	3	11	4	3
Cresylic acid	2	2	2	2
Phenol	1	1	1	1

Chemical Market

White arsenic continued on good demand, and more sales were noted on Saturday morning. A sale of one car lot was made at 11¾c. per pound, and sellers were all quoting 11c. to 11½c. Had there been goods available any cheaper it was claimed much more business could have been done. There was little around the spot market, and producers were not doing anything on contracts.

Bichromates were weak and unsettled. Makers have lowered the price of potash to 9¾c. to 10c. per pound, but could do nothing. It was admitted that sales of soda had been made fully ½c. under quoted levels of 7¾c. to 8c. per pound, but first hands were trying to hold the price steady in the face of profound dullness.

Cottonseed Oil Closing Prices

Saturday prices advanced with lard.
Closing prices were:—

	Sept. 15.	Sept. 8.
September	11.45@11.60	11.29@11.30
October	11.45@11.47	11.25@11.28
November	10.80@10.85	10.40@10.45
December	10.48@10.51	10.19@10.22
January	10.49@10.51	10.21@10.22
February	10.50@10.60	10.25@10.30
March	10.55@10.57	10.28@10.29
April	10.58@10.70	10.30@10.40
Spot	11.40@—	11.30@11.50
Crude	10.00@10.12½	10.00@—

Sales, 3,900 barrels.

Advance in Kerosene

OIL CITY, Pa., Sept. 15, 1923.

Northwestern Pennsylvania refiners announced an advance of ¼c. a gallon in the price of kerosene today.

Marland Cuts Crude Prices

TULSA, Okla., Sept. 15, 1923.

The Marland Oil Co. today annóunced cuts of from 10c. to 20c. a barrel in its prices for crude oil, following the example of most of the other companies buying Midcontinent crude.

The number of failures in the United States still shows reduction from that of a year ago, a total of 296 being reported to R. G. Dun & Co. last week. This compares with 333 defaults in the same period of 1922—a decrease of more than 10 per cent. The number involving $5,000 or more of liabilities in each case is also less than in this week of last year, the respective totals being 147 and 203.

Prices Current in the New York Market

Botanicals .....page 5
Coal Tar Products.....page 6
Comparative Prices.....page 10
Drugs and Fine Chemicals.....page 4
Dye Bases and Dyewoods.....page 8
Essential Oils.....page 5
Fertilizer Materials .....page 8
Industrial Chemicals .....page 6
Naval Stores .....page 4
Oils, Fats and Greases.....page 3
Paint and Varnish Materials.....page 3
Petroleum Oils .....page 3

The prices given in these pages are spot quotations prevailing in the New York market unless otherwise stated They are revised to the close of business at noon, Saturday, preceding date of publication. These prices are for round lots in the original packages designated. They are primarily the quotations of manufacturers and importers; wher second hands or dealers are offering at prices lower than those made by manufacturers or importers that fact is stated.

Buyers of broken lots must pay higher prices than those quoted in these pages.

Complete Market Reports appear elsewhere in this issue; their location is indicated below. Last minute market developments are reported at the bottom of page 2.

OILS, FATS AND GREASES

ANIMAL OILS

(Market Report, page 49)

Degras, American, barrels	lb.	4 @	4¼
English, barrels	lb.	3¾@	4¼
German, barrels	lb.	3¼@	3½
neutral, barrels	lb.	9 @Nom.	
Horse, barrels	lb.	7 @Nom	
Lard, prime, barrels	100 lbs.	16.50 @	—
extra winter strained, barrels,	100 lbs.	13.50 @	—
extra, barrels	100 lbs.	12.75 @	—
extra, No. 1, barrels	100 lbs.	12.00 @	—
No. 1, barrels	100 lbs.	11.50 @	—
No. 2, barrels	100 lbs.	11.00 @	—
Neatsfoot, pure, barrels	100 lbs.	14.25 @	—
extra, barrels	100 lbs.	12.00 @	—
No. 1, barrels	100 lbs.	11.50 @	—
cold pressed		17.50 @	—
Oleo, No. 1, barrels	100 lbs.	13.00 @	—
No., 2, barrels	100 lbs.	10.25 @	—
No. 3, barrels	100 lbs.	9.25 @	—
Tallow oil, acidless, barrels	100 lbs.	12.25 @	—

FISH OILS

(Market Report, page 49)

Cod, domestic, barrels	gal.	59 @	60
Newfoundland, barrels	gal.	60 @	62
Herring, coast, tanks	gal.	35 @	40
Menhaden, crude, f.o.b. Baltimore, tanks	gal.	40 @	—
light, pressed, barrels	gal.	62 @	65
yellow, bleached, barrels	gal.	65 @	67
white, bleached, barrels	gal.	67 @	69
Salmon, coast, tanks	gal.	37½@	40
Sardine, coast, tanks	gal.	35 @	40
Sperm, bleached, barrels, f.o.b. New Bedford	gal.	89 @	94
natural, barrels, f.o.b. New Bedford	gal.	86 @	91
Whale, crude, No. 1, coast, tanks	gal.	45 @	—
No. 2, coast, tanks	gal.	42½@	—
No. 3, coast, tanks	gal.	37½@	—
winter, natural, barrels	gal.	75 @	79
bleached, barrels	gal.	78 @	81
extra bleached, barrels	gal.	81 @	83

VEGETABLE OILS

(Market Report, page 37)

Castor—See Drugs, page 4.

China wood, New York, barrels—spot	lb.	22 @	—
September arrival	lb.	21½@	—
October-November	lb.	21 @	—
December-January	lb.	21 @	—
Tanks—			
spot	lb.	20½@	—
September	lb.	20½@	—
October-November	lb.	20½@	—
December-January	lb.	20½@	—
Pacific Coast—			
spot, barrels	lb.	21 @	—
tanks	lb.	19½@	20
September-shipment—			
barrels	lb.	21 @	—
tanks	lb.	20 @	—
Coconut, Ceylon grade, spot, barrels	lb.	9½@	—
coast, tanks	lb.	8¼@	8½
Cochin, spot, barrels	lb.	10 @	10¼
edible, spot, barrels	lb.	10¼@	—
Manila, spot, barrels	lb.	9¼@	9½
coast, tanks		8¼@	8½
Corn, crude, barrels	lb.	10¾@	—
tanks	lb.	10¼@	10½
Chicago, tanks	lb.	9¾@	10
refined, barrels	lb.	12 @	—
Cottonseed oil, crude, S. E., tanks	lb.	10.00 @	—
refined, spot, barrels	lb.	12.00 @	12.25
Linseed oil, raw, tanks	gal.	83 @	85
carloads, barrels	gal.	88 @	90
5-barrel lots	gal.	91 @	93
less than 5 barrels	gal.	94 @	96
boiled, tanks	gal.	85 @	87
carloads, barrels	gal.	90 @	92
5-barrel lots	gal.	93 @	95
less than 5 barrels	gal.	97 @	99
double boiled, barrels	gal.	90 @	93
refined, barrels	gal.	92 @	95
varnish grade, barrels	gal.	92 @	95
foreign, raw, barrels	gal.	90 @Nom.	
Lumbang, barrels	lb.	No offers	
Olive, denatured, barrels	gal.	1.12 @	1.15
edible, barrels	gal.	1.65 @	2.25
foots, prime green, barrels	lb.	8½@	8¾
Palm, Lagos, casks	lb.	7½@	—
shipment, casks	lb.	7½@	—
Niger, casks	lb.	7¼@	—
Bonny Old Calabar, casks	lb.	No offers	
Palm kernel, barrels	lb.	8¾@	—
Peanut, crude, barrels	lb.	15 @Nom.	
mills, tanks	lb.	13 @Nom.	
refined, deod., barrels	lb.	16 @Nom.	
Oriental, coast, in bond, tanks,	lb.	9¼@	9½
Perilla, barrels	lb.	14½@	14¾
Poppy seed, barrels	gal.	2.15 @	2.20
Rapeseed, blown, barrels	gal.	1.00 @	1.05
refined, barrels	gal.	76 @	78
Sesame, refined, barrels	lb.	11½@	11¾
Soya bean, crude, barrels	lb.	11½@	11¾
crude, tanks	lb.	9½@	9¾
July-August shipment from Orient, coast, tanks	lb.	9 @	9¼
refined, barrels	lb.	12 @	12¼
blown, barrels	lb.	12½@	13
crude, in bond, tanks	lb.	6½@	—
Tea, barrels, coast, bbls	lb.	11 @	11½
Vegetable tallow, coast, mats	lb.	7¾@Nom.	
Walnut, crude, barrels	lb.	No offers	

FATTY ACIDS

(Market Report, page 49)

Fatty acid, coconut, mills, tanks,	lb.	9 @	9½
corn, mills, tanks	lb.	10 @Nom.	
soya bean, mills, tanks	lb.	11 @Nom.	
cottonseed, mills, tanks	lb.	9½@Nom.	
Red oil, distilled, bbls, cars	lb.	9¾@	—
saponified, barrels, cars	lb.	9¾@	—
Stearic acid, single pressed, bags, cars	lb.	12¾@	—
double pressed, bags, cars	lb.	13¼@	—
triple pressed, bags, cars	lb.	14½@	—

FATS AND GREASES

(Market Report, page 39)

Grease, house, tierces	lb.	7½@	—
white, tierces	lb.	9 @	9⅛
yellow, tierces	lb.	7½@	—
Lard, city, tierces	100 lbs.	12.65 @	12.75
compound, tierces	100 lbs.	13.00 @	13.50
Middle Western, tierces	100 lbs	12.70 @	12.80
prime, Western, tierces	100 lbs.	12.80 @	12.90
Stearin, lard, barrels	lb.	15¼@	—
oleo, barrels	lb.	12¾@	13
Tallow, special, loose	lb.	7⅝@	—
extra, special	lb.	8¼@	—
city	lb.	7¼@	—
edible, barrels	lb.	9½@	—

CANDLES

Candles, adamantine, 6s, 16 oz., 20-set, cases	set	10½@	—
40-set, cases	set	10 @	—
paraffin, 6s, 14 oz., case of 40 sets	set	7½@	—
6s, 14 oz., case of six cartons containing 36 sets	set	8¼@	—
6s, 12 oz., 40-set, cases	set	6½@	—
6s, 12 oz., case of six cartons containing 36 sets	set	7½@	—
stearin, 6s, 16 oz., plain, cases,	set	17 @	—
patent ends	set	18 @	—

OIL CAKE and MEAL

Coconut, cake, bags	ton.	28.00 @Nom.	
meal, bags	ton.	29.00 @Nom.	
Copra, sun dried, bags	lb.	4¾@Nom.	
sun dried, Coast, bags	lb.	4½@Nom.	
Cottonseed, carloads, S. E.	ton.	50.00 @53.00	
wagon lots, S. E.	ton.	45.00 @50.00	
Cottonseed meal, S. E., bags		40.00 @	—
Linseed cake, bags	ton.	Nominal	
meal, bags	ton.	— @	—
Peanut meal, 20 p.c., bags	ton.	Nominal	
30 p.c., bags	ton.	Nominal	

PETROLEUM OILS

For prices of crude petroleum at wells in all fields, prices of the various refined products at refineries in the various districts, and tankwagon and service prices for gasoline and kerosene throughout the country, see Petroleum Market Section, beginning on page 41. The prices given below are those in the New York Market.

Illuminating Oils

Kerosene, tank wagon	gal.	14 @	—
Standard white, bulk, export	gal.	5½@	—
barrels	gal.	12½@	—
cases	gal.	15½@	—
Water white, bulk, export	gal.	6½@	—
barrels	gal.	13½@	—
cases	gal.	16½@	—
Burning oil, mineral seal	gal.	14½@	—

Naphthas, Gasoline, Etc.

Motor gasoline, steel bbls	gal.	19½@	—
Motor gasoline to consumers	gal.	21½@	—
Naphtha, V. M. and P. deod., barrels	gal.	18½@	—
Navy gasoline, 58@60, 437 e. p., N. Y., export bulk	gal.	12½@	—
cases	gal.	26.15 @	—
Naphtha, 59@61		13.50 @	—
63@66		15.50 @	—
66@68		17 @	—
Gas oil, Bayonne, bulk	gal.	4½@	—
Fuel oil, Bayonne, bulk	bbl.	1.60 @	—
Diesel oil, Bayonne, bulk	bbl.	1.78½@	—

Lubricating Oils

(In barrels)

Black, reduced, 25@30 cold test,	gal.	10 @	11
15 cold test	gal.	11 @	12
Cylinder, Penn., dark, fil. D	gal.	19 @	20
Penn., dark fil. E	gal.	17 @	18
Penn., bright fil., cold test	gal.	33 @	35
Unfiltered, st. ref., various grades	gal.	12 @	—
Bloomless, 30@31 grav., 100 vis. at 70 deg		17½@	18
Paraffin, pale, 903 grav., 25.4 B. 230		19 @	20
885 pale, 28.2 D, 80@85	gal.	17½@	18
875 specific gravity, pale	gal.	17 @	18
red paraffin	gal.	23 @	24
Spindle, No. 200, pale		18 @	20
180, pale	gal.	17 @	18
150, pale	gal.	15 @	—

Petrolatums

Snow white, barrels	lb.	11½@	—
Lily white, barrels	lb.	9¼@	—
Cream petroleum jelly, barrels,	lb.	7 @	—
Amber, barrels	lb.	4½@	—
Dark amber, barrels	lb.	3¼@	—
Veterinary, barrels	lb.	3 @	3½
Dark green, barrels	lb.	2 @	—

White Medicinal Oil

875@885 s. g., barrels	gal.	1.12 @	—
865@870 s. g., barrels	gal.	95 @	—
Ex. Russian crude oil, 885@890 s. g., barrels, to arrive	gal.	1.75 @	—

Paraffin Waxes—See page 6

PAINT AND VARNISH MATERIALS

PIGMENTS

(Market Report, page 23)

Alumina-hydrate—See Chemicals.			
Abestine, f.o.b. works, bags	ton.	13.50 @	14.00
Barytes, foreign, f.o.b. New York, barrels	ton.	40.00 @	42.00
Western, domestic, floated, including barrels, f.o.b. mills.	ton.	28.00 @	—
delivered New York		42.00 @	—
Southern, off color, bulk	ton.	15.00 @	20.00
Blanc fixe, pulp, bulk	ton.	50.00 @	55.00
car lots, f.o.b. works	lb.	4 @	—
dry, less than car lots	lb.	4¼@	—
Flake, white, barrels	lb.	14½@	—
Litharge, commercial, powdered, casks, net	lb.	10.40 @	—
steel kegs, less than 500 lbs.	lb.	14 @	—
500 to 2,000 lbs.		12.60 @	—
2,000 to 10,000 lbs.		12.09 @	—
10,000 to 30,000 lbs.		11.65 @	—
carloads, min. 15 tons	lb.	11.34 @	—
All above prices subject to cash discount of 2 per cent., and are for single delivery.			
assayers' steel kegs	lb.	14.75 @	15.25
Lithopone, in bags	lb.	7 @	—
in barrels, car lots	lb.	7 @	7¼
less than car lots	lb.	7¼@	7½
imported		6¾@	7¼
Metallic paints, brown, barrels	ton.	40.00 @	50.00
red, barrels	ton.	40.00 @	50.00
Orange mineral, American, casks	lb.	13.90 @	15
English, casks	lb.	15 @	—
Tours, French, barrels	lb.	17 @	—
White lead, basic carbonate, American, dry, casks	lb.	8¾@	9¼
basic sulphate, casks	lb.	8¾@	—
White lead in oil, 100-lb. kegs, less than 500 lbs.	lb.	11.85 @	14.00
500 lbs. up to 2,000 lbs.	lb.	11.35 @	12.60
2,000 lbs. up to 10,000 lbs.	lb.	11.35 @	12.09
10,000 lbs. up to 30,000 lbs.	lb.	11.35 @	11.65
carload, minimum 15 tons	lb.	11.25 @	11.34
All above prices subject to cash discount of 2 per cent., and are for single delivery.			
Red lead, dry, casks	lb.	10.90 @	—
100-lb. kegs, less than 500 lbs.	lb.	14 @	—
500 to 2,000 lbs.	lb.	12.60 @	—
2,000 to 10,000 lbs.	lb.	12.09 @	—
10,000 to 30,000 lbs.	lb.	11.65 @	—
car lots, min. 15 tons	lb.	11.34 @	—
Red lead in oil, steel kegs, less than 500 lbs.	lb.	15.50 @	—
500 up to 2,000 lbs.	lb.	13.95 @	—
2,000 up to 10,000 lbs.	lb.	13.39 @	—
10,000 up to 30,000 lbs.	lb.	12.90 @	—
car lots, minimum 15 tons	lb.	12.55 @	—
All above prices for red lead and red lead in oil are subject to cash discount of 2 per cent., and are for single delivery.			
Zinc oxide—			
French process, red seal, bags.	lb.	9¾@	—
barrels, car lots	lb.	10 @	—
barrels, l. c. lots	lb.	10¼@	—
green seal, bags	lb.	10¾@	—
barrels, car lots	lb.	11 @	—
barrels, l. c. lots	lb.	11¼@	—
white seal, barrels, car lots.	lb.	12 @	—
barrels, l. c. lots	lb.	12¼@	—
Leaded grades, American process—			
commercially lead free, bags.	lb.	7¾@	8
barrels, car lots	lb.	8½@	—
barrels, l. c. lots	lb.	9 @	—
5 p. c. lead sulphate, bags	lb.	7¼@	7¾
barrels, car lots	lb.	7¾@	7¾
barrels, l. c. lots	lb.	7¾@	—
10 to 35 p. c. lead sulphate, bags	lb.	6¾@	7¼
barrels, car lots	lb.	7¼@	7½
barrels, l. c. carlots	lb.	7¼@	7¾
Imported:—			
green seal, barrels	lb.	11½@	12¾
white seal, barrels	lb.	13½@	—

DRY COLORS

(Market Report, page 25)

Blacks

Bone, powdered, barrels	lb.	5½@	7⅛
Black oxide of iron, barrels	lb.	4½@	16
Carbon gas, standard make, f.o.b. works, bags, contract	lb.	13 @	14
f.o.b. works, spot, bulk	lb.	14 @	—
spot, New York, cases	lb.	15 @	—
special grades, cases	lb.	25 @	45
new process, contract		9½@	12
Charcoal, willow, powdered, barrels	lb.	7 @	9
common, barrels	lb.	4½@	—
Drop, barrels	lb.	7½@	10
Ivory, barrels	lb.	15 @	45
Lampblack, barrels	lb.	12 @	40
Mineral blacks, bulk	ton.	35 00 @	45.00

Blues

Bronze, barrels	lb.	50 @	—
Celestial, barrels	lb.	15 @	25
Chinese, barrels	lb.	50 @	—
Milori, barrels	lb.	50 @	—
Prussian, barrels	lb.	50 @	—
Soluble, barrels	lb.	50 @	—
Ultramarine, barrels	lb.	6 @	35

Browns

Sienna, Italian, burnt and powdered, ton lots, barrels	lb.	6 @	14¼
raw, powdered, ton lots, in barrels	lb.	5¼@	14
American, burnt and powdered, ton lots, barrels	lb.	3¾@	—
raw, ton lots, barrels		3¾@	—
Spanish, browns, high grades, bulk	ton.	45.00 @	—
low grades, bulk	ton.	40.00 @	—
Umber, Turkey, burnt, powdered, barrels	lb.	4 @	—
raw, powdered, ton lots, barrels	lb.	4 @	—
American, burnt, powdered, car lots, barrels	lb.	3¾@	4⅝
raw, car lots, barrels	lb.	3¾@	4¼
Vandyke, brown, barrels	lb.	4½@	—
domestic, ton lots, barrels	lb.	3¼@	4

Greens

Chrome, light, c.p., barrels	lb.	30 @	32
medium, barrels	lb.	32 @	34
dark, barrels	lb.	34 @	42
Commercial, barrels	lb.	12 @	—
Grinders', barrels	lb.	13 @	16
Jobbers', barrels	lb.	8 @	—
Paris green, in bulk	lb.	28 @	30
Verdigris, casks	lb.	23 @	25

Reds

Alizarine, lake, concentrated, kegs	lb.	2.00 @	2.25
Carmine, No. 40, bulk, 11-lb. tins	lb.	4.75 @	—
Amaranth, kegs	lb.	4.75 @	—
Crocus martis (purple oxide), barrels	lb.	3½@	5
Eosine, kegs	lb.	70 @	75
Indian red, English, pure, barrels	lb.	12 @	15
English ordinary, barrels	lb.	8 @	12
American, barrels	lb.	8 @	12
Oxide red, copperas, in casks	lb.	10 @	14
domestic earth, barrels	lb.	3½@	4½
Spanish, imported earth, barrels	lb.	3 @	4
Para red, toner, concentrated, 100-lb. lots, kegs		1.00 @	1.10
commercial, barrels	lb.	16 @	18
Purple, lake, kegs	lb.	1.00 @	2.00
Rose pink, barrels	lb.	20 @	25
lake, barrels	lb.	28 @	—
Toluidine toner, kegs	lb.	2.10 @	2.25
Tuscan red, barrels	lb.	17½@	25
Venetian red, barrels	lb.	3½@	6
Vermilion, quicksilver, English, barrels	lb.	1.20 @	—
kegs	lb.	1.25 @	—
American, barrels	lb.	25 @	30

Yellows

Chrome, c.p., ton lots, light, barrels	lb.	17½@	18
medium, barrels	lb.	17½@	18
dark, barrels	lb.	17½@	18
Dutch, pink, barrels	lb.	8 @	12
Iron oxides, yellow, barrels	lb.	3½@	5½
precipitated, barrels	lb.	9½@	—
Ocher, French, washed, casks	lb.	2 @	3¼
domestic, strong, barrels	lb.	2½@	3
medium, barrels	lb.	1½@	2
Ocher, golden, barrels	lb.	4½@	7
Zinc yellow, kegs	lb.	33⅓@	—

COLORS IN OIL

(Market Report, page 27)

(In 1-lb. and 5-lb. cans. Basis 100-lb cases)

Blacks

Coach black, in japan	lb.	30 @	35
in oil	lb.	25 @	35
Drop black	lb.	35 @	38
Lampblack	lb.	32 @	44

Blues

Chinese	lb.	82 @	85
Prussian	lb.	82 @	90
Ultramarine	lb.	50 @	60
Imitation cobalt	lb.	55 @	—

Browns

Sienna, Italian, burnt or raw, best grades	lb.	25 @	31
Turkey umber, burnt or raw, best grades	lb.	22 @	29
Vandyke brown, genuine	lb.	30 @	32

Greens

Chrome, chemically pure	lb.	40 @	71
commercial, 25 per cent	lb.	24 @	53

Reds

Indian	lb.	28 @	34
Tuscan	lb.	33 @	47
Venetian	lb.	16 @	21

Yellows

Chrome	lb.	27 @	35
Ocher, French	lb.	15 @	24

OTHER MATERIALS

(Market Report, page 27)

Bronze powders, gold, bulk	lb.	55 @	—
aluminum, bulk	lb.	55 @	60
Bauxite, domestic, f.o.b. mines, bulk	ton.	8.00	@10.00
Casein, bags	lb.	15½@	17
Chalk, bulk	ton.	5.00 @	5.50
Clay, china, imptd., bulk	ton.	16.25	@23.25
domestic, lump, f.o.b. point of production, bulk	ton.	15.00	@16.50
Cobalt oxide, gray, kegs	lb.	2.35 @	2.50
black, kegs	lb.	2.10 @	—
Copper oxide, kegs	lb.	20 @	—
Feldspar, bulk	ton.	20.00	@25.00
Fuller's earth, powdered, carload lots, bulk, imported	ton.	23.00	@25.00
domestic f.o.b. mines		15.00	@18.00
Graphite, flake, barrels	lb.	6½@	12
lump ground, barrels	lb.	4 @	10
Manganese ore, powd. or gran. 98@99 p.c. MnO_2, barrels	lb.	15 @	—
88@92 p.c., barrels	lb.	6 @	—
85@88 p.c., barrels	lb.	5 @	—
80@85 p.c., barrels	lb.	4½@	—
75@80 p.c., barrels	lb.	4¼@	—
70@75 p.c., barrels	lb.	3½@	—
Magnesite, raw, bulk	ton.	30.00	@35.00
calcined, powdered		50.00	@65.00
Marble flour, bulk	ton.	10.00	@15.00
Naphtha, deodorized, barrels	gal.	18½@	—
Plaster of paris, barrels	bbl.	4.25 @	5.00
dentists', barrels	bbl.	4.35 @	5.00
Pumice stone, original casks	lb.	5 @	7
lump, bags	lb.	4 @	6
selected lumps, barrels	lb.	6 @	8
powdered, pure, barrels	lb.	3 @	5
Putty, com'l, tins	100 lbs.	4.00 @	6.00
linseed oil, tins	100 lbs.	8.00 @	9.00
commercial, tubs	100 lbs.	2.50 @	—
linseed oil, tubs	100 lbs.	5.50 @	—
Rotten stone, imported, barrels,	lb.	7 @	10
selected, lumps, barrels	lb.	10 @	12
powdered, barrels	lb.	2½@	4½
domestic, f.o.b. mines	ton.	23.50	@28.00
Silica, bulk	ton.	10.00	@12.00
floated, bulk	ton.	20.00	@45.00
extra, bulk	ton.	65.00 @	—
Smalt, blue, barrels	lb.	7 @	—
extra velvet black, barrels	lb.	5 @	—
Soapstone, pow'd, in bags	ton.	15.00	@20.00
Talc, American, bags	ton.	15.00	@18.00
French, bags	ton.	20.00 @	—
French, high grade, bags	ton.	40.00 @	—
Italian, bags	ton.	47.00	@58.00
Terra alba, Am., No. 1, bags or barrels	100 lbs.	1.85 @	2.00
No. 2, bags or barrels	100 lbs.	1.25 @	—
Tripoli, car lots, bulk	lb.	2 @	2½
Whiting, commercial, bulk	100 lbs.	1.00 @	—
gilders', bolted, bulk	100 lbs.	1.10 @	—
extra gilders', bolted, bulk	100 lbs.	1.15 @	—
American, paris white, bulk	100 lbs.	1.25 @	—
English cliffstone, bulk	100 lbs.	1.50 @	—

METAL LEAF

(Market Report, page 27)

(In packages of 20 books—500 leaves)

Gold leaf, XX deep, 3⅜x3⅜ in...

	pkg.	11.00	@12.00
3⅜x3⅜ in		12.00	@13.00
3⅜x3⅜ in		13.00	@13.50
4x4 in		14.50	@14.70
4½x4½ in		18.00	@19.20
5⅞x5⅞ in		17.00	@18.98
Silver leaf, domestic, 3¼@3¾ in.	pkg.	2.50 @	—
imported, 3¼@3¾ in	pkg.	2.50 @	—
Aluminum, leaf, 5¼x5¼ in	pkg.	1.00 @	1.25
Composition metal leaf, 5¼x5¼ in.	pkg.	1.00 @	1.25

Discount of 2 per cent. for cash.

VARNISH GUMS

(Market Report, page 27)

Asphaltum, Barbados (manjak), bags or barrels	lb.	9½@	10½
California, barrels	ton.	41.50	@50.00
Cuban, bags	ton.	60.00	@80.00
Egyptian, cases	lb.	Nominal	
Gilsonite, bags	ton.	53.00	@65.00
Maltha, barrels	ton.	42.50	@50.00
Mexican, barrels or drums	ton.	22.50	@30.00
South American, bags	lb.	7 @	8
Texas, barrels or drums	ton.	15.00	@25.00
Trinidad, barrels	ton.	35.00	@80.00
Venezuelan, barrels	lb.	2¾@	—
Copal, Congo, amber, bags	lb.	18½@	19
dark, amber, bags	lb.	11 @	12
picture, bags	lb.	42 @	45
sorts, bags	lb.	7 @	8
white, bags	lb.	32 @	35
East Indian, bold, bags	lb.	23 @	24
nubs, bags	lb.	16 @	17
chips, bags	lb.	9 @	10
Manila, bright amber, bags	lb.	20 @	22
dark, hard, bags	lb.	19 @	20
pale, bags	lb.	21 @	22
nubs, bags	lb.	14 @	15
chips, bags	lb.	9 @	10
standard sorts, bags	lb.	11½@	13
Pontinak, chips, bags	lb.	12 @	15
No. 1, bags	lb.	20 @	22
nubs, bags	lb.	15 @	16
selected, fine, bags	lb.	25 @	28
Zanzibar, bean and pea, bags	lb.	36 @	38
Dammar, Batavia, cases	lb.	25½@	26
Singapore, No. 1, spot, cases	lb.	35 @	38
No. 2, cases		25 @	26
No. 3, bags	lb.	7½@	8
Kauri, No. 1, cases	lb.	67 @	68
No. 2, cases	lb.	42 @	43
No. 3, cases	lb.	21 @	22
ordinary chips, cases	lb.	20 @	21
B X, cases	lb.	48 @	52
B 1, cases	lb.	36 @	38
B 2, cases	lb.	26 @	27
B 3, cases	lb.	21 @	22
brown chips, ordinary, cases	lb.	15 @	16
chips, extra, cases	lb.	25 @	27
bright dust, cases	lb.	21 @	22
brown dust, cases	lb.	9 @	10
ordinary dust, white, cases	lb.	12 @	13
X dark, cases	lb.	75 @	—
XX pale, cases	lb.	75 @	80
XXX pale, cases	lb.	92 @	94
XXXX extra pale, cases	lb.	No stocks	
XXXXX picture quality, cases	lb.	No stocks	

Artificial Resins

Paracoumarone resin, drums	lb.	10 @	11
Ester gums, high acid, barrels	lb.	8½@	9
low acid, barrels	lb.	9½@	10

SHELLAC

(Market Report, page 60)

D. C., bags	lb.	80 @	82
V. S. O., bags	lb.	80 @	82
Diamond I, bags	lb.	76 @	78
Superfine, orange, bags	lb.	66 @	67
Fine, bags	lb.	65 @	66
T.N., bags	lb.	62 @	63
Garnet, A. C	lb.	61 @	62
Button, bags	lb.	71 @	72
Bleached, ground, barrels	lb.	61 @	62
bone dry, barrels	lb.	72 @	73

DRIERS

(Market Report, page 27)

(In Barrels)

Aluminum, cleate, fused	lb.	17 @	19
palmitate, precip	lb.	24 @	26
resinate, precip	lb.	12 @	13
stearate, precip	lb.	25 @	28
Calcium, linoleate	lb.	7 @	10
resinate, precip	lb.	12 @	15
stearate, precip	lb.	25 @	27
Cobalt, acetate	lb.	1.12 @	—
carbonate	lb.	2.07 @	—
hydrate	lb.	2.62 @	—
linoleate, solid	lb.	53 @	65
paste drier	lb.	26 @	35
resinate, fused	lb.	21 @	22
resinate, precip	lb.	46 @	52
Lead acetate	lb.	12 @	13½
linoleate, solid	lb.	20 @	27
resinate, fused	lb.	10 @	11
resinate, precip	lb.	15 @	20
Manganese, borate, c. p	lb.	25 @	35
borate, technical	lb.	18 @	25
oxide, 85 per cent	lb.	5 @	6
resinate, fused	lb.	6 @	8
resinate, precip	lb.	13 @	16
sulphate, anhydrous	lb.	10½@	11½
Zinc, carbonate	lb.	15 @	18
resinate, fused	lb.	8½@	9
resinate, precip	lb.	12½@	15
sulphate, crystals	lb.	3½@	4
stearate, precip	lb.	25 @	32

GLUES

(Market Report, page 29)

Extra white, barrels	lb.	30 @	40
Medium, white, barrels	lb.	19 @	26
Cabinet, barrels	lb.	19 @	30
low grade, barrels	lb.	16 @	19
Common bone, barrels	lb.	11 @	15
French, barrels	lb.	18 @	40
Fish, liquid, barrels	gal.	1.40 @	2.00

METALS

(Market Report, page 23)

Aluminum, 98@99, virgin	lb.	26.50	@27.50
Copper, electrolyte	lb.	13¾@	13¾
Lead, common, New York	lb.	.0685 @	—
East St. Louis		.0675 @	.0680
Quicksilver—See Drugs, page 4.			
Silver, foreign	oz.	64¼@	—
Zinc, New York		.0685 @	.0690
East St. Louis		.0650 @	.0655
Tin plate, per base box		5.50 @	—

WINDOW GLASS

(Market Report, page 29)

United inches.	Bracket. Sizes.		AA	Single A	B
25	6x 8	to	10x15	$24.00	$20.00	$19.00
34	11x14 / 12x18	to	14x20	25.00	21.00	20.00
40	10x26 / 18x22	to	16x24	27.00	22.50	21.00
50	20x20	to	20x30	28.00	23.70	22.00
54	15x26	to	24x30	29.00	24.50	22.50
60	26x28 / 26x34	to	24x36	30.00	26.00	23.25
70	28x32 / 30x30 / 32x38	to	30x40	32.00	28.75	25.25
80	34x36	to	30x50	36.50	33.25	28.75
84	30x52	to	30x54	39.00	35.50	31.25

United inches.	Bracket. Sizes.		AA	Single A	B
25	6x 8	to	10x15	$32.00	$28.00	$26.50
34	11x14 / 12x18	to	14x20	35.00	31.00	29.00
40	10x26 / 18x22	to	16x24	39.00	34.00	31.00
50	20x20	to	20x30	42.00	37.00	34.50
54	15x36	to	24x30	43.00	38.00	35.00
60	26x28 / 26x34	to	24x36	44.00	39.00	35.50
70	28x32 / 30x30 / 32x38	to	30x40	47.00	42.00	38.00
80	34x36	to	30x50	51.00	46.00	41.50
84	30x52	to	30x54	52.00	47.00	42.50
90	30x56	to	34x56	55.00	50.00	46.00
94	34x58	to	34x60	56.00	51.00	47.00
100	36x60	to	40x60	66.00	60.00	56.00

Sizes making over 100 united inches, packed in 100-foot cases only.

105	40x62	to	40x64	$142.00	$130.00	$120.00
110	40x66	to	40x70	158.00	146.00	136.00
115	40x72	to	40x74	178.00	162.00	152.00
120	40x76	to	40x80	210.00	190.00	180.00

The following discounts apply for all regular, single strength and double strength window glass, in carload lots and over, for shipments in zones B, C, D, E and F:—

Single strength A quality, 25-inch bracket sizes, 85 and 5 per cent.; single strength A quality, 34 and 40-inch bracket sizes, 84 and 2½ per cent.; single strength A quality, 50-inch and above bracket sizes, 83 per cent.

Single strength B quality, 25-inch bracket sizes, 87 and 2½ per cent.; single strength B quality, 34 and 40-inch bracket size, 85 and 2 per cent.; single strength B quality, 50-inch and above bracket sizes, 83 and 4 per cent.

Double strength A quality, all brackets, 84 per cent.

Double strength B quality, all brackets, 87 per cent.

Boxing charges for single and double are as follows:—First three bracket sizes, 20c. per 50-foot box; above sizes up to and including 100 united inches, 40c. per box.; sizes over 100 united inches, 80c. per 100-foot box.

For glass packed 100 feet to the case the charges will be double the amount charged for the same size packed 50 feet to the box.

Fractional cutting charges as follows:—Single strength, one fraction, 15c. per box; two fractions, 30c. per box; double strength, one fraction, 20c. per box; two fractions, 40c. per box.

NAVAL STORES

(Market Report, page 31)

Turpentine, spirits, ex yard, barrels	gal.	1.02 @	—
wood, steam dist., barrels	gal.	90 @	—
destructive dist., barrels	gal.	70 @	—
Rosins (prices per unit of 280 lbs.)—			
B, barrels		5.95 @	—
D, barrels		5.95 @	—
E, barrels		5.95 @	—
F, barrels		5.95 @	—
G, barrels		5.95 @	—
H, barrels		5.95 @	—
I, barrels		5.95 @	—
K, barrels		6.00 @	—
M, barrels		6.00 @	—
N, barrels		6.25 @	—
W. G., barrels		6.75 @	—
W. W., barrels		7.25 @	—
Rosin, pitch, barrels	bbl.	5.50 @	—
Tar, kiln burned, barrels	bbl.	11.00 @	—
retort, barrels	bbl.	11.00 @	—
Pine oil, steam distilled, over 933 sp. gr., barrels	gal.	70 @	75
under 933 sp. gr., barrels	gal.	67 @	70
Rosin oil, first rectified, barrels	gal.	45 @	—
second rectified, barrels	gal.	47 @	—
third rectified, barrels	gal.	52 @	—
fourth rectified, barrels	gal.	56 @	—
Tar oil, genuine distilled, barrels	gal.	50 @	—
commercial, barrels	gal.	31½@	—
Gum, thus, barrels	280 lbs.	15.00	@Nom.

DRUGS AND FINE CHEMICALS

(Market Report, page 51)

Acetanilide, U.S.P., barrels, kegs		32 @	33
Acetphenetidin, barrels	lb.	1.85 @	1.90
Acetone (acetate of lime), car lots, drums, spot, f.o.b. works	lb.	25 @	Nom.
less car lots, drums, spot, f.o.b. works	lb.	25½@	Nom.
(Fermentation) car lots, drums, f.o.b. works	lb.	25 @	Nom.
less car lots, drums, f.o.b. works	lb.	25½@	Nom.
methyl—See Methyl.			
Acetone oil, light, barrels	gal.	1.10 @	1.15
heavy, barrels	gal.	1.10 @	1.15
Aconitine, alkaloid, vials	oz.	20.00	@30.00
Adepsianae, hydrous, tins	lb.	21 @	22
anhydrous, barrels	lb.	23 @	24
Agar agar	lb.	1.85 @	1.90
Alcohol, butyl, barrels	lb.	26 @	29
ethyl, cologne spirits, barrels		4.77 @	4.87
188 proof, barrels	gal.	4.69 @	4.79
190 proof, barrels	gal.	4.74 @	4.84
export, barrels, drums	gal.	40 @	41
Methyl—See Methanol.			
denatured, special No. 1, 190 proof, barrels	gal.	45½@	47½
drums, extra	gal.	39½@	41½
completely No. 1, 188 proof, barrels	gal.	47½@	49½
drums, extra	gal.	41½@	43½
No. 5, 188 proof, barrels	gal.	44½@	46½
drums extra	gal.	38½@	40½
No. 6, 188 proof, barrels	gal.	43½@	45½
drums, extra	gal.	37½@	39½
180 proof, lc. per gal. less than 188 proof.			
phenyl ethyl, bottles	lb.	7.00 @	8.50
Aloin, cans	lb.	87 @	—
Ambergris, black, tins	oz.	8.00	@12.00
gray, tins	oz.	28.00	@30.00
Amidopyrene, cans	lb.	5.50 @	6.00
Ammonia, borate	lb.	35 @	—
carb., U.S.P., lump, barrels	lb.	10¼@	11¾
powdered, barrels	lb.	11¾@	12¼
chloride, U. S. P., granular, barrels	lb.	17 @	19
Amyl acetate, cans	gal.	4.50 @	4.75
butyrate, absolute, cans	lb.	1.20 @	1.30
Antipyrine, bulk, cans	lb.	2.35 @	2.50
Antimony—See Chemicals, page 6.			
Arecolin, hydrochloride, vials	oz.	9.00	@10.50
Aristol.—See Thymol Iodide.			
Asarin, barrels	lb.	75 @	80
resale	lb.	72½@	73
Atropine, sulphate, vials	oz.	4.00 @	4.17
alkaloid, vials	oz.	7.50 @	8.00
Barium, chlorate, kegs	lb.	14 @	15
chloride, C. P., barrels	lb.	21 @	25
dioxide, drums	lb.	22 @	29
nitrate, casks	lb.	8½@	9¼
Bay rum, Porto Rico, barrels	gal.	2.75 @	2.85
St. Thomas, barrels	gal.	2.75 @	2.85
domestic, barrels	gal.	1.00 @	1.20
Bismuth, ammonium citrate, U.S.P., cans	lb.	5.75 @	5.80
ammonium solution, carboys	lb.	32 @	34
citrate, U.S.P., 5 boxes	lb.	3.15 @	3.20
glycerite, N. F., bottles	lb.	76 @	81
hydroxide, boxes	lb.	3.55 @	3.60
metallic, cases	lb.	2.80 @	2.85
nitrate, crystals, jars	lb.	2.00 @	2.05
oxide, powder, boxes	lb.	3.85 @	3.90
oxy, chloride, boxes	lb.	3.50 @	3.55
salicylate, 38@40 p.c., barrels	lb.	2.00 @	2.05
subsalicylate, 62@66 p.c., barrels	lb.	3.10 @	3.15
subbenzoate, boxes	lb.	3.45 @	3.50
subcarbonate, U.S.P., barrels..	lb.	3.40 @	3.45
x-ray, bottles	lb.	3.75 @	3.80
subgallate, barrels		2.80 @	2.85
sublodide, bottles	lb.	2.70 @	2.75
subnitrate, powder, barrels	lb.	2.90 @	2.95
cones, bottles	lb.	3.90 @	3.95
Borax, contracts, sacks	lb.	5½@	5½
barrels	lb.	5½@	6
kegs	lb.	6 @	6½
Bordeaux mixture—See chemicals, page 6.			
Bromide, ammonium, granular, barrels	lb.	32 @	33
imported, cases	lb.	19 @	20
cadmium, bottles	lb.	1.22 @	1.25
calcium, jars	lb.	47 @	51
lithium, jars	lb.	1.75 @	2.00
ethyl, pure, jars	lb.	1.55 @	1.57
potassium, granular, barrels	lb.	26 @	27
crystals, barrels	lb.	26 @	27
imported, cases	lb.	16 @	19
sodium, granular, barrels	lb.	24 @	25
imported, cases	lb.	21 @	22
strontium, granular, jars	lb.	33 @	34
crystals, jars	lb.	33 @	34
Bromine, purified, cases	lb.	30 @	35
Burgundy pitch, barrels	lb.	5 @	6
Butyric ether, cans	lb.	1.20 @	1.30
Cadmium, metal sticks, cases	lb.	1.20 @	1.25
Caffeine, alkaloid, cans, cases	lb.	4.00 @	4.25
citrated, cans	lb.	3.50 @	3.70
hydrobromide, bottles	lb.	4.65 @	6.35
sulphate, bottles	lb.	5.40 @	5.45
Calcium, phos., precip., barrels	lb.	9 @	10
sulpho, carbolate, barrels		60 @	67
Carmine, kegs	lb.	18 @	19
compound, boxes	lb.	9 @	10
Camphor, monobromated, barrels	lb.	1.75 @	1.85
Cantharides, Chinese, cases	lb.	1.00 @	1.25
Russian, cases	lb.	1.45 @	1.75
Carbolic Acid—See Phenol, page 6, column 3.			
Casein, C.P., barrels	lb.	40 @	41
Castile soap, white, cases	lb.	21 @	25
powdered, cases	lb.	24 @	25
green, pure, cases	lb.	7½@	8
ordinary, cases	lb.	7 @	7½
mottled, pure, cases	lb.	12 @	13
ordinary, cases	lb.	10 @	11
Castor oil, medicinal, barrels	lb.	13½@	—
cases	lb.	14½@	—
No. 3, barrels	lb.	13 @	
cases	lb.	14 @	—
Chalk, precipitated, heavy, casks, f.o.b. factory	lb.	3¼@	4
light, f.o.b. factory, casks	lb.	3¾@	4½
extra light, f.o.b. factory, casks.	lb.	4¼@	5
Charcoal, willow, pwd., barrels,	lb.	7 @	9
Chloral, hydrate, drums	lb.	75 @	78
Chlorine, liquid—See Chemicals, page 6.			
Chloroform, technical, drums	lb.	32 @	—
U.S.P., drums	lb.	35 @	—
Chrysarobin, cans	lb.	3.00 @	3.25
Citric acid—See Acids, page 6.			
Citrates, ammonium, kegs	lb.	1.00 @	1.10
iron, cans	lb.	99 @	1.00
iron and ammonium, brown scales, cans	lb.	84 @	86
green scales, cans	lb.	84 @	86
iron phosphates, cans	lb.	89 @	91
iron pyrophosphate, cans	lb.	94 @	96
potash, cans	lb.	65 @	67
soda, U.S.P. VIII, barrels	lb.	55 @	57
U.S.P. IX, barrels	lb.	62 @	64
Cocaine, hydrochloride, cans	oz.	7.00 @	7.25
Cocoa butter, bulk, bags	lb.	25½@	26
fingers, cases	lb.	34 @	35
Codeine, acetate, cans	oz.	7.65 @	—
alkaloid, cans	oz.	8.50 @	—
hydrobromide, cans	oz.	6.80 @	—
hydrochloride, cans	oz.	7.65 @	—
nitrate, cans	oz.	7.65 @	—
phosphate, cans	oz.	6.35 @	—
salicylate, cans	lb.	6.35 @	—
sulphate, cans	oz.	6.80 @	—
Codliver oil, Norwegian, barrels	bbl.	24.00	@25.50
Collodion, U.S.P., drums	lb.	22 @	25
flex, U.S.P., drums	lb.	24 @	27
Corn syrup, 42 deg., barrels,	100 lbs.	3.31 @	3.56
43 deg., barrels	100 lbs.	3.26 @	3.51
Cotton, soluble, barrels	lb.	60 @	65
Coumarin, makers, cans	lb.	4.50 @	4.75
resale, cans	lb.	4.35 @	4.40
Cream of tartar, pwd., barrels	lb.	26 @	—
imported, barrels	lb.	24¾@	25¼
Creosote, U. S. P., bottles	lb.	40 @	45
carbonate, bottles	lb.	1.80 @	1.90
Cresol, U. S. P., barrels.—See Basic Products, page 6, col. 3.			
Cuttlefish, Trieste, straps	lb.	14 @	15
French, straps	lb.	14 @	15
Cyanide-chloride mixture, drums,	lb.	20½@	23
Dovers powder, U.S.P., cans	lb.	2.20 @	2.25
Emetine hydrochloride, vials	oz.	17.50	@18.00
Epsom salt, imported, technical,	100 lbs.	1.10 @	1.15
U.S.P.	100 lbs.	1.75 @	2.00
domestic, technical	100 lbs.	1.80 @	2.00
U.S.P.	100 lbs.	2.15 @	2.40
Ether, U.S.P., anaesthesia, drums	lb.	17 @	18
U. S. P. concentrated, drums,	lb.	14 @	15
U. S. P. 1880, drums	lb.	39 @	40
washed, drums	lb.	31 @	32
engine ether, cans	lb.	26 @	28
Ethyl chloride, cylinders	lb.	50 @	55
Eugenol, bottles	lb.	2.85	@3.25
Eucalyptol, cans	lb.	75 @	80
Formaldehyde, makers, barrels...	lb.	12½@	13
resale, barrels	lb.	12 @	13
Furfural, drums	lb.	25 @	
Fusel oil, crude, barrels	gal.	4.00	@Nom.
refined, drums	gal.	4.75	@Nom
Gelatine, silver, cases	lb.	85 @	90
Glycerin, C.P., drums extra	lb.	17 @	17¼
cans	lb.	18½@	19
dynamite, drums inc	lb.	16½@	17
30 degrees, yellow, drums	lb.	16 @	16¼
soaplye, loose, drums	lb.	11 @	11¼
saponification, loose, drums	lb.	12½@	13
Glycerophosphate, calcium, cans.	lb.	1.55 @	1.75
soda, crystals, cans	lb.	1.70 @	1.90
soda, liquor, 75 p.c., bottles	lb.	1.15 @	1.85
manganese, cans	lb.	2.90 @	3.10
potash liquor, 75 p.c., cans	lb.	1.65 @	1.85
Guaiacol, crystals, bottles	lb.	3.50 @	3.90
liquid, bottles	lb.	2.35 @	2.60
carbonate, boxes	lb.	5.00 @	Nom
Haarlem oil, cases...gross bottles		3.50 @	5.20
Heliotropine, cans	lb.	2.00 @	2.50
Hexamethylene-tetramine, drums, makers	lb.	95 @	1.00
imported, drums	lb.	70 @	72
Homatropine, hydrochloride, vials	oz.	15.00	@16.00
Honey, California, cans	lb.	11¼@	12
Hydrogen peroxide, bottles	gross	7.75	@20.00
Hydroquinone, kegs	lb.	1.40 @	1.45
Hypophosphite, ammonium, barrels	lb.	1.35 @	1.40
calcium, cans	lb.	65 @	70
iron, cans	lb.	1.50 @	1.60
magnesium, cans	lb.	1.15 @	1.25
potash, cans	lb.	85 @	90
soda, cans	lb.	75 @	80
Ichthyol, bottles	lb.	4.00 @	4.25
Iodide, ammonium, jars	lb.	5.20 @	5.25
arsenous, bottles	lb.	6.25 @	—
arsenous and mercuric solution, bottles	lb.	27 @	—
barium, bottles	lb.	5.10 @	—
cadium, bottles	lb.	4.45 @	—
calcium, bottles	lb.	4.35 @	—
copper, bottles	lb.	5.65 @	—
ethyl, bottles	lb.	6.25 @	—
iron, bottles	lb.	4.20 @	4.40
iron iodide syrup, demijohns	lb.	70 @	73
lead, jars	lb.	3.20 @	—
lithium, bottles	lb.	5.40 @	—
manganese, bottles	lb.	6.40 @	—
mercury, green, yellow, kegs	lb.	4.00 @	4.05
red, kegs	lb.	4.10 @	4.15
potassium, barrels	lb.	3.75 @	3.80
sodium, jars	lb.	4.25 @	4.30
starch, bottles	lb.	1.55 @	—
strontium, jars	lb.	4.00 @	4.10
sulphur, bottles	lb.	4.55 @	—
zinc, bottles	lb.	5.20 @	5.70
Iodine, resublimed, kegs	lb.	4.55 @	4.60
crude, kegs	lb.	3.97 @	4.06
Iodoform, kegs	lb.	6.00 @	6.26
Iron, reduced, cans	lb.	70 @	80
Isinglass, Russian, cases	lb.	4.50 @	4.75
Ketone, ethyl, methyl, drums	lb.	25 @	25½
Lanoline—See Adepsianae.			
Licorice powder, comp., U.S.P., barrels	lb.	13 @	14
extract, mass, cases	lb.	25 @	26
powdered, barrels	lb.	35 @	37
Lithium, carbonate, barrels	lb.	1.50 @	1.60
citrate, barrels	lb.	1.70 @	1.80
Magnesia, carb., U.S.P., barrels,	lb.	10½@	11
technical, barrels	lb.	9 @	9½
bags	lb.	8 @	8½
calcined, U.S P., barrels	lb.	45 @	60
Manganese, peroxide, boxes	lb.	35 @	40
dioxide, precipitated, kegs	lb.	35 @	40
Methanol, 95%, drums	gal.	95 @	1.00
barrels	gal.	1.05 @	—
97%, drums	gal.	97 @	1.02
barrels	gal.	97 @	1.02
purified, drums	gal.	1.05 @	—
barrels	gal.	1.15 @	—
Menthol, cases	lb.	17.00	@18.00
Mercurials, calomel, kegs	lb.	1.25 @	—
corrosive sublimate, kegs	lb.	1.02 @	1.17
mercury bisulphate, kegs	lb.	86 @	—
oxide, black, kegs	lb.	2.20 @	—
yellow, kegs	lb.	2.51 @	—
red precipitate, kegs	lb.	1.38 @	—
white precipitate, barrels	lb.	1.49 @	1.54
blue mass, U.S.P., can	lb.	62 @	64
mercury and chalk, kegs	lb.	62 @	—
ointment, ½%, cans	lb.	59 @	—
ointment, ¼%, cans	lb.	80 @	—
ointment, 30%, cans	lb.	62 @	—
citrine ointment, jars	lb.	50 @	—
Methylene blue, medicinal, kegs,	lb.	2.25 @	2.60
Methyl acetone, tank cars	gal.	1.15 @	—
drums	gal.	1.20 @	—
Milk powder, unskimmed, barrels	lb.	30 @	33
skimmed, barrels	lb.	15 @	16
Morphine, acetate, bulk, vials	oz.	6.30 @	—
alkaloid, cans	oz.	7.90 @	—
diacetyl alkaloid, cans	oz.	9.65 @	—
diacetyl hydrochloride, cans	oz.	8.70 @	—
ethyl hydrochloride, vials	oz.	9.95 @	—
hydrobromide, cans	oz.	6.30 @	—
hydrochloride, cans	oz.	6.30 @	—
sulphate, cans	oz.	6.30 @	—
apomorphine, vials	oz.	19.10	@19.35
Musk, Cabardine, pods, bottles,	oz.	16.00	@17.00
Cabardine, grained, bottles	oz.	25.00	@26.00
Tonquin, pods, bottles	oz.	17.00	@18.00
Tonquin, grained, bottles	oz.	32.00	@33.00
synthetic, bottles	lb.	13.00	@15.00
Myrbane Oil—See Nitrobenzene (Coal Tar Intermediates)—page 6.			
Naphthaline—See Coal Tar Products, page 6.			
Olive Oil—See Vegetable Oils, page 3.			
Opium, U.S.P., cases	lb.	8.00 @	9.00
powdered, cans	lb.	9.00	@10.00
granular, cans	lb.	9.00	@10.00
Oxalates, ammonium, crystals, kegs

Oxalate, sodium, neutral, pwd., bottles	lb.	37 @	38
Ox gall, bottles, lb.	lb.	3.00 @	3.05
Paraldehyde, bottles	lb.	50 @	55
Paraformaldehyde, kegs	lb.	52½@	55
Petrolatum—See Page 8.			
Phenolphthalein, drums	lb.	1.50 @	1.60
Phenylhydrazine, hydrochloride, bottles	lb.	5.00 @	—
Phosphorus — See Chemicals, page 6.			
Pilocarpine, hydrochloride, vials	oz.	7.50 @	—
nitrate, vials	oz.	7.50 @	—
Podophyllin, U.S.P., tins	lb.	6.00 @	6.50
Potash, acetate, barrels	lb.	30 @	31
bicarbonate, barrels	lb.	8½@	9½
chlorate, barrels	lb.	7½@	8½
permanganate, U.S.P., drums	lb.	18 @	19
guaiacol sulphonate, cans	lb.	1.85 @	2.00
Quicksilver, flask (75 lbs.), spot	lb.	60.50 @	61.00
Quinine sulph., domestic, tins	oz.	50 @	—
Japanese, tins	oz.	50 @	—
Dutch, tins	oz.	50 @	—
alkaloid, cans	oz.	67 @	—
acetate, cans	oz.	88 @	—
arsenate, cans	oz.	88 @	—
arsenited, cans	oz.	78 @	—
benzoate, cans	oz.	88 @	—
bisulphate, cans	oz.	50 @	—
citrate, cans	oz.	62 @	—
dihydrobromide, vials	oz.	66 @	—
dihydrochloride, vials	oz.	66 @	—
ferrocyanide, cans	oz.	88 @	—
formate, cans	oz.	85 @	—
glycerophosphate, cans	oz.	88 @	—
hydriodide, cans	oz.	88 @	—
hydrobromide, cans	oz.	62 @	—
hydrochloride, cans	oz.	62 @	—
hydrochloride and urea, cans	oz.	88 @	—
hydrochlorsulp, cans	oz.	66 @	—
hypophosphite, cans	oz.	83 @	—
lactate, cans	oz.	78 @	—
phenolsulphonate, cans	oz.	88 @	—
phosphate, cans	oz.	74 @	—
salicylate, cans	oz.	63 @	—
tannate, cans	oz.	45 @	—
tartrate, cans	oz.	88 @	—
valerate, cans	oz.	87 @	—
cinchonine, alkaloid, cans	oz.	38 @	43
sulphate, cans	oz.	25 @	—
cinchonidine, alkaloid, cans	oz.	70 @	75
sulphate, cans	oz.	50 @	—
Quinidine, alkaloid, cans	oz.	70 @	75
sulphate, cans	oz.	50 @	—
Resorcin, crys., U.S.P., cans	lb.	2.25 @	2.50
Rochelle salt, crystals, boxes	lb.	21 @	—
powdered, barrels	lb.	21 @	—
imported, barrels	lb.	20 @	20½
Rosewater, triple, demijohns	lb.	6.20 @	6.50
Saccharin, soluble, cans	lb.	1.85 @	1.90
insoluble, cans	lb.	1.85 @	1.90
Salicin, cans	lb.	5.00 @	5.25
Salicylate, methyl, drums	lb.	45 @	47
tins		47 @	49
soda, boxes	lb.	40 @	45
Salol, kegs	lb.	80 @	85
Santonin, crystals, bulk, cans		150.00 @	—
powder, cans	lb.	152.00 @	—
Saponin, tins	lb.	1.00 @	1.10
Seidlitz mixture, barrels	lb.	17 @	20
Silver, nitrate, bottles	oz.	43⅝@	44⅞
nucleinate, vials	oz.	32 @	33
proteinate, vials	oz.	42 @	47
Soda, benzoate, U.S.P., barrels	lb.	65 @	75
cacodylate, jars	lb.	5.65 @	5.90
cyanide—See Chemicals, page 6			
phosphate, U.S.P., barrels	lb.	7½@	8
sulphocarbolate, barrels	lb.	42 @	44
Sparteine sulphate, cottles	oz.	60 @	70
Strontium, carbonate, pure, barrels	lb.	35 @	38
nitrate, casks, kegs	lb.	12½@	13⅛
Strychnine, alkaloid, crys., cans	oz.	1.15 @	—
alkaloid, powder, cans	oz.	1.05 @	—
acetate, bulk, cans	oz.	1.05 @	—
arsenate, bulk, cans	oz.	1.05 @	—
arsenited, bulk, cans	oz.	1.05 @	—
glycerophosphate, cans	oz.	1.05 @	—
hydrobromide, cans	oz.	1.05 @	—
hydrochloride, cans	oz.	1.05 @	—
hypophosphite, cans	oz.	1.15 @	—
nitrate, cans	oz.	1.05 @	—
phosphate, cans	oz.	1.05 @	—
sulphate, crystals and powdered, cans	oz.	84 @	—
Sugar coloring, barrels	gal.	65 @	67
Sugar of milk, barrels	lb.	21 @	22
Sulphonmethane, kegs	lb.	3.00 @	3.25
Sulphonethylmethane, U.S.P., kegs		4.00 @	4.25
Sulphur, flowers, bags	100 lbs.	3.00 @	3.50
barrels	100 lbs.	3.25 @	3.65
refined flour, bags	100 lbs.	2.25 @	2.55
barrels	100 lbs.	2.50 @	2.80
roll brimstone, bags	100 lbs.	2.00 @	2.20
barrels	100 lbs.	2.15 @	2.35
rubber, bags	100 lbs.	2.35 @	2.65
barrels	100 lbs.	2.60 @	2.90
lac, kegs	lb.	10 @	—
precipitated, kegs	lb.	18 @	19
washed	100 lbs.	6.00 @	—
commercial — See Chemicals, page 6.			
Tartar emetic, tchnical, crystals, barrels	lb.	28 @	30
powdered, barrels	lb.	28 @	30
U.S.P., powdered, barrels	lb.	33 @	35
Tartaric acid—See Acids—Page 6			
Theobromine, alkaloid, cans	lb.	5.75 @	6.00
Terpinhydrate, kegs	lb.	60 @	62
Thymol, bottles	lb.	3.00 @	3.25
iodide, barrels	lb.	6.75 @	7.00
Vanillin, tins	oz.	40 @	41
Venice turpentine, true, cases	lb.	17 @	18
Witch hazel extract, barrels	gal.	1.20 @	1.30
Yohimbin hydrochloride, vials	oz.	7.00 @	7.50
Zinc cyanide, bottles	lb.	37 @	46
oxide, U.S.P., barrels	lb.	18 @	18½

BOTANICAL DRUGS

(Market Report, page 55)

Agaric, white, bales	lb.	No stock	
granulated		4.00 @	—
Almonds, bitter, boxes	lb.	32 @	35
sweet, boxes	lb.	40 @	41
meal, barrels, boxes, kegs	lb.	28 @	29
Areca nuts, bags	lb.	9 @	10
Balm of Gilead buds, bags	lb.	40 @	45
Cassia, fistula, baskets	lb.	9½@	10
Colocynth apples, barrels	lb.	15 @	24
pulp, U.S.P., bales	lb.	30 @	35
Dragon's blood, mass, cases	lb.	50 @	60
reeds, thick, cases	lb.	No stock	
thin, cases	lb.	1.40 @	1.50
Ergot, bags	lb.	40 @	41
Grains of Paradise, bags	lb.	12 @	13
Guarana, cases	lb.	55 @	75
Iceland moss, bales	lb.	7 @	8
Irish moss, ordinary, bales	lb.	5½@	7
bleached, bales	lb.	7 @	9
Kamala, U.S.P., tins	lb.	1.75 @	1.90
Kola nuts, bags	lb.	4½@	6
Lupulin, N. F., tins	lb.	1.30 @	1.40
Lycopodium, cases	lb.	36 @	40
Manna, flakes, large, cases	lb.	No stock	
small, cases	lb.	28 @	30
Nux vomica, buttons, bales	lb.	5 @	6
powdered, barrels, boxes	lb.	9 @	10
Papain, crude, cases	lb.	2.05 @	—
powder, cases	lb.	2.25 @	2.75
Poppy heads, barrels		45 @	55
Quassia chips, bales	lb.	7 @	7½
St. John's bread, bales	lb.	3 @	—
Tamarinds, barrels	lb.	6 @	7
kegs	keg.	3.50 @	3.75

BALSAMS

(Market Report, page 55)

Copaiba, S.A., U.S.P., cans	lb.	27 @	28
Para, cans	lb.	23 @	24
Fir, Canada, cans	gal.	12.80 @	13.00
Oregon, barrels	gal.	2.60 @	2.70
Peru, drums	lb.	1.75 @	1.80
Tolu, cans	lb.	2.25 @	Nom.

BARKS

(Market Report, page 55)

Angostura, bales	lb.	8 @	13
Bayberry, bags	lb.	9 @	10
Barberry, bark of root, bales	lb.	20 @	25
bark of tree	lb.	12 @	13
Black haw, bark of root, bales	lb.	40 @	45
bark of tree, bales	lb.	28 @	29
Buckthorn, true, bales	lb.	6 @	7
Canella alba, bales	lb.	51 @	52
Cascara sagrada, new peel, bales	lb.	18 @	Nom.
old peel, bales	lb.	19 @	20
Cascarilla quills, long, bales	lb.	42 @	—
small, bales		35 @	36
siftings, bales		No stock	
Cinchona, quills, short, bags	lb.	50 @	55
long, cases	lb.	55 @	65
broken, bags	lb.	23 @	28
chips, bags	lb.	23 @	28
Condurango, bags	lb.	13 @	14
Cramp, so-called, bales	lb.	8 @	9
genuine, bales	lb.	40 @	43
Cottonroot, bales	lb.	28 @	30
Dogwood, domestic, bales	lb.	7 @	8
Jamaica, bales	lb.	10 @	12
Elm, bundles, select, cases	lb.	28 @	30
grinding, bales	lb.	14 @	16
powdered, barrels, boxes	lb.	21 @	25
Fringe tree, bales	lb.	19 @	20
Lemon peel, bales	lb.	8 @	10
Mezereon, bales	lb.	10 @	13
Oak, red, bales	lb.	6 @	—
white, bales	lb.	6 @	6½
Orange peel, bitters, Curacao, bales	lb.	7½@	8
sweet Malaga, ribbons, bales	lb.	7½@	8
Prickly ash, bales	lb.	13 @	16
Sassafras, ordinary, bales	lb.	14 @	18
select, bales	lb.	25 @	28
Simarubra, bales	lb.	8½@	9
Soap, whole bales	lb.	7½@	8
cut, bales, barrels	lb.	8½@	10
crushed, bales, barrels	lb.	9½@	10
Tagalder, bales	lb.	5½@	—
Tonga, bales	lb.	30 @	45
Wahoo of root, bales	lb.	90 @	95
of tree, bales	lb.	40 @	45
Wild cherry, thick, bales	lb.	5½@	7
thick, rossed, bales	lb.	9 @	10
thin, bales	lb.	9 @	10
rossed, green, bales	lb.	13 @	14
White pine, bales	lb.	7½@	9
White poplar, bales	lb.	8 @	8

BEANS

(Market Report, page 56)

Calabar, bags	lb.	13 @	14
St. Ignatius, bags	lb.	15 @	—
Tonka, Angostura, casks	lb.	2.00 @	2.10
Vanilla, Mexican, whole, tins	lb.	9.50 @	11.00
cuts, tins	lb.	6.25 @	6.50
Bourbon, tins	lb.	5.00 @	5.50
South American, tins	lb.	5.75 @	6.00

BERRIES

(Market Report, page 56)

Cubeb, ordinary, bags	lb.	68 @	70
XX, bags	lb.	70 @	72
powdered, cases, kegs	lb.	78 @	80
Fish (cocculus indicus), bags	lb.	3 @	4
Horse nettle, dry, bags	lb.	35 @	45
Juniper, bags	lb.	8 @	8½
Laurel, bales	lb.	10 @	11
Prickly ash, bales	lb.	11 @	15
Raspberries, dried, barrels	lb.	60 @	61
Saw palmetto, bales	lb.	9 @	10
Sloe, bales	lb.	1 @	2

FLOWERS

(Market Report, page 56)

Arnica, bales	lb.	7½@	8
Borage, bales	lb.	19 @	22
Calendula, petals, bales	lb.	25 @	30
Chamomile, Roman, bales	lb.	2.00 @	—
Hungarian, genuine, cases	lb.	9 @	10
Clover tops, bales	lb.	23 @	25
Elder, bales	lb.	14 @	16
Insect flowers, bales	lb.	52 @	Nom.
powdered, barrels, kegs	lb.	60 @	62
with stems, barrels, kegs	lb.	35 @	40
Kuosso, bales	lb.	2.25 @	2.50
Lavender, ordinary, bales	lb.	25 @	30
select, bales	lb.	37 @	45
Linden, with leaves, bales	lb.	14 @	16
without leaves, bales		30 @	32
Malva, blue, bales	lb.	25 @	32
black, bales	lb.	60 @	75
Mullein, cans	lb.	1.25 @	1.30
Orange, cases	lb.	30 @	40
Poppy, red, bales	lb.	25 @	32
Rosemary, bales	lb.	25 @	30
Saffron, American, bales	lb.	1.00 @	1.10
Valencia, tins	lb.	35.00 @	36.00

HERBS AND LEAVES

(Market Report, page 56)

Aconite, leaves, bales	lb.	12 @	25
Boneset herb, bales	lb.	6½@	11
leaves, bales	lb.	8 @	10
Buchu, short, bales	lb.	90 @	95
long, bales		Nominal	
Buckbean, leaves, bales	lb.	9 @	10
Belladonna, leaves, bales	lb.	18 @	20
Catnip leaves, bales	lb.	26 @	27
Cannabis indica, imp., cases	lb.	3.50 @	5.50
domestic, U.S.P., bales	lb.	1.40 @	1.45
not tested, bales	lb.	75 @	80
Chiretta, bales	lb.	8 @	10
Coltsfoot, bales	lb.	5 @	7
Conium, bales	lb.	12 @	15
Corn silk, bales	lb.	5½@	5½
Damiana, bales	lb.	12 @	13
Deer tongue, bales	lb.	11 @	12
Digitalis, bales	lb.	7½@	—
Eucalyptus, bales	lb.	5 @	5¼
Euphorbia pilulifera, bales	lb.	15 @	16
Grindelia, robusta, bales	lb.	7½@	9
Henbane, bales	lb.	35 @	40
Henna leaves, bales	lb.	12 @	14
powdered, barrels, boxes	lb.	17 @	18
Horehound, bales	lb.	9 @	10
Horsetail herb, bales	lb.	14 @	—
Jaborandi, bales	lb.	15 @	16
Laurel, good, bales	lb.	4¾@	4¾
Liverwort, bales	lb.	20 @	23
Lobelia, bales	lb.	18 @	22
Matico, bales	lb.	20 @	24
Marjoram, French, No. 1, bls	lb.	13 @	13½
German, bales	lb.	17½@	22
Patchouli, bales	lb.	22 @	27
Pennyroyal herb, bales	lb.	8 @	—
Peppermint, bales	lb.	15 @	35
Pichi, bags	lb.	35 @	45
Pulsatilla, bales	lb.	23 @	24
Princess pine, bales	lb.	35 @	37
Rose, red, bales	lb.	60 @	65
Rosemary, bales	lb.	4 @	5
Rue, bales	lb.	17 @	—
Rupturewort herb, bales	lb.	18 @	19
Sage, Greek, bales	lb.	4¼@	5
Dalmatian, bales		5 @	6½
Savory, bales	lb.	8½@	9
Skull cap, Eastern, bales	lb.	No stock	
Senna, Alex., whole, bales, cs.	lb.	28 @	30
half leaf, bales	lb.	18 @	20
siftings, bales	lb.	11 @	12
Tinnevelly, bales	lb.	5½@	15
powdered, barrels, boxes	lb.	8 @	10
pods, bales	lb.	8 @	8½
Spearmint, American, bags	lb.	15 @	24
Squaw vine, bales	lb.	17 @	19
Stramonium, bales	lb.	6½@	7
Thyme, Spanish, bales	lb.	7½@	8
French, bales	lb.	9 @	9½
Uva ursi, bales	lb.	5½@	6
Witch hazel, bales	lb.	7½@	9
Wormwood, foreign, bales	lb.	11 @	14
Yerba santa, bales	lb.	10 @	12

ROOTS

(Market Report, page 71)

Aconite, U.S.P., bales	lb.	45 @	50
Aletris, bags	lb.	60 @	65
Alkanet, bales	lb.	6½@	8
Althea, cut, cases	lb.	28 @	30
Angelica, European, bales	lb.	No stock.	
American, bales	lb.	13 @	16
Arnica, bales	lb.	20 @	30
Arrowroot, Bermuda, barrels	lb.	No stock	
St. Vincent, barrels	lb.	14½@	15
Belladonna, bales	lb.	11 @	14
Berberis, aquifolium, bales	lb.	14 @	15
Beth, bales	lb.	22 @	25
Blood, bales	lb.	14 @	15
Bluflag, bales	lb.	24 @	25
Bryonia, bags	lb.	8 @	9
Burdock, bales	lb.	19 @	20
Calamus, ordinary, bags	lb.	6½@	8
bleached, cases	lb.	36 @	38
Cohosh, black, bales	lb.	13 @	14
blue, bales	lb.	16 @	18
Couchicum, bales	lb.	8 @	10
Colombo, bales	lb.	2 @	3
powdered, barrels, boxes	lb.	6 @	7
Cranesbill, bales	lb.	10 @	11
Culvers, bales	lb.	32 @	34
Dandelion, bales	lb.	21 @	23
Doggrass, cut, bales	lb.	11½@	13
Echinacea, bales	lb.	33 @	35
Elecampane, bales	lb.	8 @	9½
Galangal, bales		7 @	9
Gelsemium, bales	lb.	13 @	14
Gentian, whole, bales	lb.	9 @	10
ground, barrels, boxes	lb.	11 @	12
powdered, barrels, boxes	lb.	12 @	14
Ginger—See Spice Market.			
Ginseng, Northern, wild, cases	lb.	12.00 @	15.00
Southern, wild, cases	lb.	8.50 @	10.00
cultivated, cases	lb.	8.00 @	12.00
fibers, cases	lb.	3.75 @	4.00
Golden seal, bales	lb.	3.50 @	3.60
powdered, boxes	lb.	3.75 @	3.85
Hellebore, white, pwd., barrels	lb.	16 @	17
Ipecac, Cartagena, bags	lb.	1.85 @	1.90
powdered, boxes	lb.	1.90 @	1.95
Rio, bags	lb.	1.80 @	1.90
powdered, boxes	lb.	1.90 @	1.95
Jalap, bales	lb.	30 @	35
powdered, barrels, boxes	lb.	38 @	40
resin, rump, tins	lb.	Nominal	
powdered, barrels, kegs	lb.	Nominal	
Kava kava, bales	lb.	15 @	17
Lady slipper, bales	lb.	50 @	55
Licorice, bales	lb.	7½@	9
selected, cases	lb.	16 @	17
powdered, barrels, boxes	lb.	9½@	10
Lovage, American, bales	lb.	35 @	40
foreign, bales	lb.	22 @	25
Manaca, bales	lb.	17 @	20
Mandrake, bales, car lots	lb.	20 @	21
Musk, bales		Nominal	
Orris, Florentine, whole, bags	lb.	7 @	8½
powdered, barrels, boxes	lb.	9 @	11
Verona, bales	lb.	5 @	6½
powdered, barrels, boxes	lb.	7½@	8½
fingers, cases	lb.	58 @	80
Pareira brava, bales	lb.	17 @	19
Pellitory, bales	lb.	20 @	21
Pink, true, bales	lb.	1.00 @	1.05
Poke, bales	lb.	7 @	7½
Rhubarb, Shensi, cases	lb.	No stock	
high dried, cases	lb.	40 @	42
powdered, barrels, kegs	lb.	45 @	48
Snake, Canada	lb.	40 @	—
Sarsaparilla, Honduras, bales	lb.	60 @	61
Mexican, bales	lb.	30 @	31
Scammony, bags	lb.	7 @	8
Senega, bales	lb.	60 @	62
Serpentaria, bales	lb.	80 @	85
Skunk cabbage, bales	lb.	15 @	16
Spikenard, bales	lb.	23 @	25
Squills, bales	lb.	4 @	4½
powdered, barrels	lb.	11 @	—
Stillingia, bales	lb.	12 @	13
Stone, bales	lb.	9 @	—
Turmeric, Aleppy, bags	lb.	8¾@	9
Madras, bags	lb.	10¾@	10½
powdered, barrels	lb.	10¾@	11
Unicon, false helonias, bales	lb.	90 @	95
true (aletris), bags	lb.	60 @	65
Valerian, Belgian, bales	lb.	10 @	12
Wild yam, bales	lb.	10 @	11
Yellow dock, bales	lb.	12 @	13½
Yellow (Xanthoriza), bales	lb.	12 @	13
Zedoary, bales	lb.	6 @	7

SEEDS

(Market Report, page 71)

Anise, Russian, bags	lb.	14 @	15
Spanish, bags	lb.	19 @	20
star, actual weight, cases	lb.	12½@	13
Canary, Spanish, bags		No stock	
South American, bags	lb.	5½@	6
Morocco, bags		5⅜@	6
Caraway, Dutch, bags	lb.	24¼@	25¼
African, bags	lb.	24 @	Nom.
Cardamoms, bleached, cases	lb.	1.00 @	1.70
decorticated, cases	lb.	1.15 @	1.20
green, bags	lb.	1.00 @	1.10
Celery, bags	lb.	21 @	22
Couchicum, bags	lb.	9 @	10
Conium, bags	lb.	13 @	15
Coriander, Morocco, sound	lb.	10 @	10½
fair	lb.	9¾@	10
bleached, bags	lb.	15 @	16
Indian	lb.	5 @	8
Cumin, Morocco, bags	lb.	32 @	Nom
Indian, bags	lb.	27 @	27½
Dill, natural	lb.	5 @	6
cleaned	lb.	8½@	9
Fennel, French, bags	lb.	16½@	Nom.
Indian, bags	lb.	10 @	12¼
Foenugreek, bags	lb.	5½@	6¾
Hemp, Manchuria, bags	lb.	3¼@	3½
Russian, bags		No stock	
Job's tears, bags	lb.	25 @	26
Larkspur, bags	lb.	33 @	35
Lobelia, bags	lb.	55 @	60
Millet, natural, bags	lb.	4 @	4½
hulled, bags	lb.	6 @	6½
Mustard, Bari, brown, bags	lb.	No stocks	
Sicily, bags	lb.	No stocks	
California, brown, bags	lb.	8½@	9
Chinese, yellow, bags	lb.	No stock	
Danish, yellow, bags	lb.	8½@	9
Dutch, yellow, bags	lb.	8 @	9
English, yellow, bags	lb.	No stocks	
Parsley, bags	lb.	8½@	9¼
Poppy, Dutch, bags	lb.	11 @	11½
German, bags	lb.	10¼@	11
Indian blue, bags	lb.	7½@	8¼
Pumpkin, bags	lb.	8 @	15
Quince, bags	lb.	90 @	1.05
Rape, South American, bags	lb.	5¼@	6
Japanese, bags	lb.	5½@	6
Dutch, bags	lb.	8 @	8½
Sabadilla, powdered, barrels	lb.	15 @	16
Stavesacre, bags	lb.	28 @	29
Stramonium, bags	lb.	10 @	11
Strophanthus, Kombe, bags	lb.	28 @	30
Sunflower, S. A., bags	lb.	5½@	6
Danubian, bags	lb.	5¾@	6¼
domestic, bags	lb.	7 @	7½
Worm, Levant, bags	lb.	3.50 @	3.75
American, bags	lb.	10 @	11

SPICES

(Market Report, page 71)

Cassia, Batavia, No. 1, bales	lb.	10¼@	10½
shortstick, bales	lb.	9½@	10
Batavia, No. 3, bales	lb.	9¾@	10
No. 1 Saigon rolls, cases	lb.	23 @	26
China, selected rolls, cases	lb.	9¼@	9¾
broken, selected, bales	lb.	5¾@	6
extra select, bales	lb.	6½@	6¾
buds, cases	lb.	13 @	13½
Cinnamon, Ceylon, 1, bales	lb.	23½@	24
2, bales	lb.	22¼@	22¼
3, bales	lb.	21½@	22
Cloves, Amboyna, bags	lb.	No stock	
Zanzibar, bales	lb.	29½@	30
Penang, cases	lb.	53 @	54
Ginger, Cochin, Abc, bags	lb.	16 @	16½
Lemon, bags	lb.	15 @	15½
African, No. 1, bags	lb.	13¼@	13½
Japan, bags	lb.	14 @	14¾
Jamaica, fancy, bold, bags	lb.	37 @	40
dark grinding, bags	lb.	31 @	32
medium, bags	lb.	33½@	34¼
Mace, Banda, cases	lb.	53½@	54
Penang, No. 2, cases	lb.	51 @	52
No. 2, Batavia, cases	lb.	44 @	45
Nutmegs, 110s, bags, cases	lb.	23 @	24
80s, bags, cases	lb.	26 @	27
grinding, bags, cases	lb.	15¾@	22
Paprika, extra fancy, bags	lb.	21 @	22
fancy, bags	lb.	20½@	21
medium, bags	lb.	16½@	17¼
Pepper, black, Singapore, bags	lb.	10½@	10¾
Aleppy, bags	lb.	9 @	9¼
Lampong, bags	lb.	8¾@	9
Tellicherry, bags	lb.	9½@	9½
white, Singapore, bags	lb.	14½@	14¾
Muntok, bags	lb.	14¾@	15
red chillies, Japan, No. 1, bags	lb.	29 @	30
Mombassa, bags	lb.	16 @	16½
Talay	lb.	14½@	15
capsicum, Bombay, bags	lb.	12½@	13
Pimento, bags	lb.	5 @	5¼

ESSENTIAL OILS

(Market Report, page 57)

Almond, bitter, bottles	lb.	3.25 @	3.50
bitter, S.P.A., bottles	lb.	3.50 @	3.75
sweet, true, cases	lb.	33½@	34
apricot, peach, kernel, drums	lb.	25 @	26
Angelica, bottles	lb.	40.00 @	—
Anise, native, cases	lb.	45 @	47
lead, free, U.S.P., tins	lb.	48 @	50
Bay, tins	lb.	2.50 @	2.60
Bergamot, copper	lb.	2.60 @	3.00
Benzaldehyde—See other Intermediates, page 6.			
Birch tar, crude, tins	lb.	50 @	60
refined, tins	lb.	1.00 @	1.10
Bois de rose, tins	lb.	2.45 @	2.55
Cade, tins	lb.	35 @	40
Cajeput, tins	lb.	80 @	85
Calamus, tins	lb.	4.25 @	4.50
Camphor, heavy, grav., drums	lb.	12½@	13½
Japanese, native, drums	lb.	13 @	14
Cananga, native, tins	lb.	2.25 @	2.50
rectified, tins	lb.	3.00 @	3.25
Capsicum, oleoresin, cans	lb.	2.50 @	2.75
Caraway, tins	lb.	7.00 @	7.25
Carvol, bottles	lb.	12.00 @	13.00
Cassia, 75@80 per cent., cases	lb.	No stock	
redistilled, U.S.P., can		3.10 @	3.25
Cedar leaf, tins	lb.	1.05 @	1.15
wood, tins	lb.	26 @	28
Celery, bottles	lb.	8.50 @	12.00
Cinnamon, Ceylon, heavy, bottles	lb.	11.75 @	15.00
Citronella, Ceylon, drums	lb.	68 @	70
cans		70 @	72
Java, drums	lb.	85 @	90
Cloves, cans	lb.	2.05 @	2.15
bottles	lb.	2.10 @	2.20
Copaiba, tins	lb.	40 @	50
Coriander, bottles		17.00 @	18.00
Croton, tins	lb.	1.00 @	1.10
Cubeb, tins	lb.	5.75 @	6.00
Cummin, bottles	lb.	14.00 @	15.00
Dill, bottles	lb.	4.00 @	4.50
Erigeron, tins	lb.	75 @	90
Eucalyptus, Australian, cases	lb.	52½@	60
Fennel seed, sweet, tins		1.10 @	1.20
Geranium, Turkish, tins	lb.	4.25 @	4.50
rose, Africa, Algeria, tins	lb.	7.50 @	8.75
Bourbon, tins	lb.	6.25 @	6.50
Ginger, bottles	lb.	5.00 @	5.50
oleoresin, cans	lb.	3.00 @	3.25
Gingergrass, tins	lb.	3.00 @	3.25
Hemlock, tins	lb.	1.10 @	1.25
Juniper berries, U.S.P., tins	lb.	1.25 @	1.35
wood, tins	lb.	50 @	75
Lavender, flowers, tins	lb.	2.50 @	3.25
spike, French, tins	lb.	1.10 @	1.15
Spanish, tins	lb.	75 @	90
garden, tins	lb.	45 @	50
Lemon, domestic, tins	lb.	75 @	80
Messina, coppers	lb.	70 @	85
Lemongrass, tins	lb.	85 @	90
Lime, expressed, tins	lb.	1.50 @	1.65
distilled, tins	lb.	75 @	85
Linaloe, cases	lb.	2.15 @	2.25
Mace, distilled, tins		95 @	1.00
expressed, cakes	lb.	1.85 @	1.90
Malefern, bottles	lb.	2.45 @	2.50
Mustard, natural, bottles	lb.	17.00 @	18.00
artificial, bottles	lb.	2.25 @	2.40
Neroli, petals, bottles	lb.	90.00 @	120.00
bigarde, bottles	lb.	75.00 @	110.00
synthetic, bottles	lb.	10.00 @	12.00
Niobe, cans	lb.	2.00 @	2.25
Nutmegs, tins	lb.	95 @	1.00
Orange, domestic, tins	lb.	3.15 @	3.25
distilled, tins	lb.	1.75 @	2.00
Italian, sweet, coppers	lb.	3.35 @	4.00
West Indian, tins	lb.	2.50 @	2.75
bitter, tins	lb.	2.60 @	2.

PERFUME BASES

Almond meal, French, powdered, barrels	lb.	35 @	—
Bergamot peel, whole, barrels	lb.	1.25 @	—
powdered, barrels	lb.	1.50 @	—
Cassie flowers, whole, cases	lb.	1.50 @	—
powdered, cases	lb.	2.00 @	—
Civet, horns, glass jars	lb.	2.75 @	3.00
Lavender flor, French, bales	lb.	35 @	38
Oak moss, selected, bales	lb.	40 @	—
powdered, barrels	lb.	60 @	—
Orange flowers, whole, cases	lb.	40 @	50
Patchouly, leaves, bales	lb.	22 @	27
powdered, barrels	lb.	40 @	—
Red rose leaves, French, bales	lb.	55 @	65
powdered, barrels	lb.	60 @	65
Sandalwood, powdered, bbls.	lb.	50 @	—
Vetivert root, whole, bales	lb.	28 @	30
powdered, barrels	lb.	35 @	40
White rose buds, French, bales,	lb.	28 @	29
powdered, barrels	lb.	33 @	34

GUMS AND WAXES

GUMS

(Market Report, page 59)

Aloes, Curacao, cases	lb.	8 @	8¼
in gourds, barrels	lb.	10 @	11
Barbados, true, cases	lb.	65 @	70
Cape, cases	lb.	8½@	9
Socotrine, kegs	lb.	30 @	40
Ammoniac, tears, cases	lb.	1.15 @	1.20
Arabic, firsts, bags	lb.	26 @	27
seconds, bags	lb.	22 @	24
cleaned amber, sorts	lb.	13½@	14
white, bags	lb.	22 @	26
Asafoetida, lump, cases	lb.	23 @	24
powdered, barrels, boxes	lb.	50 @	52
Benzoin, Siam, cases	lb.	1.25 @	1.35
Sumatra, cases	lb.	27 @	30
Camphor, Am. refined, barrels	lb.	93 @	—
blocks, cases	lb.	94¼@	—
squares, cases	lb.	94½@	—
1ds, cartons	lb.	98¼@	—
bulk, cases	lb.	96¼@	—
24s, cartons	lb.	98½@	—
bulk, cases	lb.	96½@	—
32s, cartons	lb.	99 @	—
bulk, cases	lb.	98 @	—
Japanese, ref., slabs, cases	lb.	87 @	89
shipment, in bond	lb.	Nominal	
tablets, tins	lb.	93 @	94
Chinese, refined, cases	lb.	85 @	86
Chicle, bags	lb.	60 @	70
Euphorbium, cases	lb.	20 @	22
Galbanum, cans	lb.	80 @	85
Gamboge, mass & pipe, cases	lb.	95 @	98
powdered, barrels	lb.	1.08 @	1.15
Guaiac, lump, cases	lb.	30 @	40
strained, cases	lb.	80 @	85
Karaya, powdered, barrels, boxes, drums	lb.	11 @	17
Kino, tins	lb.	50 @	55
Mastic, cases	lb.	70 @	80
Myrrh, cases	lb.	34 @	40
Olibanum, siftings, cases	lb.	8½@	9
tears, cases	lb.	11 @	18

Opium—See Drugs, page 4.

Scammony resin, cases	lb.	1.05 @	1.25
Aleppo, cases	lb.	No stocks	
Virgin, cases	lb.	No stocks	
Sandrac, casks	lb.	20 @	23
Senegal, picked, bags	lb.	23 @	24
sorts, bags	lb.	13¾@	14
Styrac, U.S.P., cases	lb.	80 @	90

Thus—See Naval Stores, page 4.

Tragacanth, Aleppo, 1, cases	lb.	1.45 @	1.50
No. 2, cases	lb.	1.30 @	1.35
No. 3, cases	lb.	1.25 @	1.30
No. 4, bags	lb.	1.00 @	1.15
No. 5, bags	lb.	75 @	90
No. 6, bags	lb.	50 @	60
sorts, bags	lb.	50 @	—
Turkish, No. 1, bags	lb.	1.20 @	Nom
No. 2, bags	lb.	75 @	80
No. 3, bags	lb.	55 @	60
No. 4, bags	lb.	No stocks	

WAXES

(Market Report, page 59)

Bayberry, bags	lb.	25 @	30
Beeswax, white, pure, cases	lb.	40 @	42
African, bags	lb.	22 @	22½
Brazilian, bags	lb.	26 @	26½
Chilean, bags	lb.	27½@	28
refined, cases	lb.	80 @	82
Candelilla, bags	lb.	21 @	23
Carnauba, flor, bags	lb.	52 @	53
No. 1, bags	lb.	40 @	42
No. 2, regular, bags	lb.	31 @	33
No. 2, North Country, bags	lb.	21 @	22
No. 3, chalky bags	lb.	16¾@	18
No. 3, North Country, bags	lb.	17 @	18
Ceresin, domestic, yellow, bags		9 @	10
white, bags		10 @	11
imported, yellow, bags		20 @	22
white, bags		23 @	26
Japan, cases		18 @	19
Montan, crude, bags	lb.	6 @	6½
bleached, bags	lb.	No stocks	
Ozokerite, black, 160 m. p., bags,	lb.	23 @	24
green, 170 m. p., bags	lb.	27 @	28
refined, white		No stocks	
yellow		No stocks	
Paraffin, white crude scale, 122@124 A.m.p., bags	lb.	2¾@	3
124@126 A.m.p.		2¾@	3
yellow crude scale, 124@126 A.m.p., bags	lb.	2¾@	2⅞
match, bbls., 105@108 A. m. p., bags	lb.	4 @	—
111@115 A.m.p., bags	lb.	3⅞@	—
semi-refined, solid, bags, 122 @124 A.m.p., bags	lb.	3 @	3¼
124@126 A. m. p.		3¼@	—
fully refined, slabs, bags or cases, 118@120 A. m. p., bags	lb.	3¼@	3½
123@125 A. m. p.		3½@	—
128@127 A. m. p.		3¾@	—
128@130 A. m. p.		4 @	—
130@132 A. m. p.		4¼@	—
133@135 A. m. p.		5¼@	—
135@137 A. m. p.		5⅝@	—
136@140 A. m. p.		5½@	—
Spermaceti, block, cases	lb.	36 @	37
cakes, cases	lb.	40 @	41

INDUSTRIAL CHEMICALS

(Market Report, page 63)

Acetyl chloride, carboys	lb.	38 @	40
Alum, ammonia, lump, barrels	100 lbs.	3.50 @	3.60
ground, barrels	100 lbs.	3.60 @	3.70
powdered, barrels	100 lbs.	3.85 @	3.95
ammonia, chrome, barrels	lb.	6 @	7
potash, lump, barrels	lb.	3 @	4¼
ground, barrels	lb.	4½@	5
powdered, barrels	lb.	4¾@	5
potash, chrome, barrels	lb.	6 @	7
soda, barrels	lc.	3½@	4
Aluminum hydrate, heavy, bags,	lb.	6¼@	6¼
barrels	lb.	6½@	7
light, barrels	lb.	18 @	20
sulphate, iron free, bags	100 lbs.	2.40 @	2.50
commercial, bags	100 lbs.	1.40 @	1.60
Ammonia, aqua, 16 deg., drums,	lb.	5 @	5½
18 deg., drums	lb.	5½@	6
20 deg., drums	lb.	6¾@	7
26 deg., drums	lb.	7 @	7½
anhydrous, cylinders	lb.	30 @	33
carbonate, barrels	lb.	9 @	10¼
chloride—See Ammoniac, Sal.			
fluoride, barrels	lb.	21 @	23
nitrate, casks, technical	lb.	7½@	8
persulphate, cases	lb.	55 @	60
sulphocyanide, kegs	lb.	55 @	60
Ammoniac, sal, gray, casks	lb.	8 @	9
white, granular, casks	lb.	6¼@	8
lump, barrels	lb.	15 @	—
Antimony, needle, powdered, barrels	lb.	6½@	7
chloride (butter of), carboys	lb.	14 @	16
metal, solid	lb.	7½@	8
oxide, white, barrels	lb.	8 @	9
sulphuret, crimson, barrels	lb.	37 @	40
golden, barrels	lb.	19 @	22
red, 16@17 p.c., barrels	lb.	15 @	16
Argols, crude, 30 p.c., casks	lb.	6½@	7½
Arsenic, white, powd., kegs	lb.	11 @	12
red, kegs		13 @	15½
metal, cases	lb.	30 @	32
Barium, binoxide, drums	lb.	18 @	20
carbonate, bags	ton.	70.00	@77.00
chloride, crystals, bags	ton.	85.00	@95.00
Bleaching powder, works, drums,	100 lbs.	1.50 @	1.75
imported, drums	100 lbs.	None	
Blue vitriol, 90 p. c., barrels,	100 lbs.	5.00 @	5.10
97@98 per cent., barrels	100 lbs.	4.90 @	5.00
imported, 98 p. c.	100 lbs.	4.75 @	5.00
Bordeaux mixture, paste, barrels,	lb.	15 @	18
powdered, barrels	lb.	20 @	24
Brimstone, crude, carloads, bulk, works	ton.	14.00	@15.00
f.o.b. Atlantic seaboard	ton.	18.00	@19.00
Cadmium sulphide, boxes	lb.	1.50 @	1.75
Calcium arsenate, barrels	lb.	12 @	14
carbide, drums	100 lbs.	5.50 @	6.50
chloride, 70@75 p.c., works, bags	ton.	24.75	@30.50
hydrate, works, bags	ton.	12.00	@13.00
barrels	100 lbs.	75 @	1.00
phosphate, monobasic, barrels,	lb.	7 @	10
Carbon, bisulphide, drums	lb.	6½@	7
tetrachloride, drums	lb.	9 @	10½
Cellulose, acetate, bags	lb.	1.60 @	2.00
Chlorine, liquid, cylinders, works	lb.	5 @	6
Chrome, acetate, 20 deg. Baume, barrels	lb.	10 @	12
Copper, carbonate, barrels	lb.	17½@	18
cyanide, technical, barrels	lb.	46 @	48
oxide, kegs	lb.	17 @	18
Copperas, carloads, bulk	ton.	18.00	@ —
carloads, bags	ton.	23.00	@ —
carloads, barrels	ton.	25.00	@26.00
Ethyl acetate, tank cars	gal.	90 @	—
car lots, drums	gal.	92 @	—
less car lots, drums	gal.	95 @	—
Ferric chloride, crystals, barrels	lb.	7½@	10
40 deg. liquid, carboys	lb.	5 @	6
Fluorspar, gravel, 85 p.c., bulk, mines	ton.	23.50	@ —
white acid, lump, 98 p.c., bulk, mines	ton.	45.00	@ —
bags	ton.	51.00	@ —
Glauber's salt, works, barrels	100 lbs.	1.35 @	1.45
spot, imported, bags	100 lbs.	75 @	85
Iron, nitrate of, commercial, kegs	lb.	2½@	3
true, kegs	lb.	9 @	9½
Lead, acetate, brown, broken, barrels	lb.	13 @	13½
white, crystals, barrels	lb.	14 @	14½
broken, barrels	lb.	13½@	14
granular, barrels	lb.	13¾@	14¼
Lead, arsenate, paste, barrels	lb.	14 @	15
cases	lb.	16 @	17
powdered, barrels	lb.	16 @	18
cases	lb	18 @	20
Lime, acetate, bags	100 lbs.	4.00 @	—
Lime-sulphur solution, barrels	gal.	15 @	18
Magnesite, calcined	ton.	55.00 @	—
crude	ton.	18.00	@20.00
Magnesium, chloride, barrels	ton.	38.00	@42.00
imported, barrels	ton.	32.00	@38.00
fluorosilicate, crystals, barrels,	lb.	14 @	16
Manganese, dioxide, tech., drums	lb.	7 @	10
chloride, barrels	lb.	10 @	11
Methyl chloride, cylinders	lb.	50 @	—
Niter cake, bulk, works	ton.	6.00 @	7.00
Nickel oxide, barrels	lb.	40 @	42
Nickel salts, double, barrels	lb.	11½@	—
single, barrels	lb.	10½@	—
Phosphorus, red, casks	lb.	70 @	75
yellow, casks	lb.	35 @	40
sesquisulphide, casks	lb.	None	
Potash, bichromate, casks	lb.	9¾@	10
binoxalate, drums	lb.	85 @	88
caustic, 88@92 p.c., works, casks	lb.	9 @	10
88@92 p.c., imported, spot, casks	lb.	7¼@	7¾
70@75 p. c., works, casks	lb.	9 @	10
70@75 p.c., imported, spot, casks	lb.	— @	—
carbonate, 96@98 p.c., calcined, works, casks	lb.	None	
96@98 p.c., calcined, spot, imported, casks	lb.	6¾@	7
80@85 p.c., calcined, works, casks	lb.	None	
80@85 p.c., calcined, spot, imported, casks	lb.	6¼@	6½
80@85 p.c., hydrated, works, casks	lb.	None	
80@85 p.c., hydrated, spot, imported, casks	lb.	6¾@	7¼
chlorate, works, casks	lb.	8½@	9
spot, imported, casks	lb.	7½@	8
chloride, crystals, barrels	lb.	4 @	4½
cyanide, cases	lb.	47 @	50
meta bisulphite, kegs	lb.	14 @	16
oxalate, barrels	lb.	29 @	32
perchlorate, casks	lb.	12 @	15
nitrate—See Saltpeter.			
permanganate, technical, casks,	lb.	17 @	18

U.S.P.—See Drugs and Fine Chemicals—Page 5

prussiate, yellow, casks	lb.	30 @	32
red, casks	lb.	60 @	62
sorts, casks	lb.	7 @	8
titanium, oxalate, kegs	lb.	27 @	—
Salt cake, ground, bulk, works	ton.	25.00	@27.00
barrels	ton.	27.00	@30.00
Saltpeter, cryst., as to size, barrels	lb.	7½@	9
granulated, barrels	lb.	6½@	8¾
powdered, barrels	lb.	7½@	7¾
Soda, acetate, works, barrels	lb.	5½@	5¾
spot, barrels	lb.	5¼@	5½
ash, light, 58 per cent., spot, bags	100 lbs.	1.75 @	2.10
barrels	100 lbs.	1.95 @	2.30
contracts, 58 p. c., works, bulk	100 lbs.	1.33 @	—
bags	100 lbs.	1.45 @	1.50
barrels	100 lbs.	1.69 @	—
dense, 58 p. c., spot, bags		2.00 @	2.35
barrels		2.25 @	2.50
contracts, 58 p. c., works, bulk	100 lbs.	1.42 @	—
bags	100 lbs.	1.51 @	—
barrels	100 lbs.	1.75 @	—
bicarbonate, works, barrels	100 lbs.	2.00 @	—
spot, barrels	100 lbs.	2.25 @	—
bichromate, works, casks	lb.	7¾@	8
bisulphate, works, bulk	ton.	6.00 @	7.00
works, barrels	ton.	7.00 @	8.00
bisulphite, powdered, barrels	100 lbs.	4.25 @	4.75
35@38 p. c. solution, barrels	100 lbs.	1.40 @	1.50
caustic, 76 p. c., spot, drums	100 lbs.	3.26 @	3.75
contracts, 76 p.c., works		3.16½@	—
ground, 76 p.c., works, drums		3.60 @	3.85
flake, 76 p.c., works, drums		3.60 @	3.85
60 p. c. test, drums		2.65 @	—
chlorate, works, kegs	lb.	6½@	7
spot, imported, kegs	lb.	6½@	6¾
cyanide, 100-lb. cases, spot, cases	lb.	19½@	21
contracts, 96@98 p. c., works, cases		22½@	23
fluoride, barrels	lb.	8½@	9
silico, barrels	lb.	6½@	7
hyposulphite—See Dyestuffs and Tanstuffs, page 8.			
monohydrated, barrels	lb.	2¾@	3
nitrate, granulated, barrels	lb.	4¼@	4½
powdered, barrels	lb.	5¼@	5½
crystals, barrels	lb.	5 @	5¼
nitrite, 96@98 p. c., works, casks	lb.	7¼@	7½
96@98 p. c., spot, imported, casks	lb.	7½@	7¾
phosphate, commercial, barrels,	lb.	3¼@	4
prussiate, yellow, casks	lb.	13¾@	14
sal	100 lbs.	1.15 @	1.25
silicate, 60 degree, works, tanks	100 lbs.	1.60 @	—
60 degree, works, drums	100 lbs.	1.70 @	—
60 degree, spot, drums		1.85 @	2.00
40 degree, works, tanks	100 lbs.	75 @	—
40 degree, works, drums	100 lbs.	85 @	—
40 degree, spot, drums	100 lbs.	1.30 @	1.50
sulphide, 60 p.c. fused, casks	100 lbs.	3.00 @	4.75
60 per cent., broken, casks	100 lbs.	3.25 @	5.25
30 p. c., crystals, barrels	100 lbs.	2.25 @	2.50
sulphite, barrels	lb.	3½@	3¾
sulphocyanide, barrels	lb.	45 @	55
tri, phosphate, barrels	lb.	4½@	5
tungstate, tech., crystals, kegs,	lb.	75 @	80
Sulphur, flour, commercial, bags,	100 lbs.	1.35 @	1.70
superfine, bags	100 lbs.	2.00 @	2.40
chloride, drums	lb.	4 @	5
dioxide, anhydrous, cylinders	lb.	8 @	10
Sulphuryl chloride, drums	lb.	70 @	75
Tin, bichloride, barrels	lb.	12 @	12½
crystals, barrels	lb.	31½@	32
oxide, barrels	lb.	45 @	47
Urea, cases	lb.	21 @	23
Zinc, carbonate, barrels	lb.	14 @	16
ammonium salts, casks	lb.	8 @	8½
chloride, granular, drums	lb.	6 @	7
fused, drums	lb.	5 @	6
solution, works	lb.	2¾@	3¼
cyanide, drums	lb.	37 @	—
dust, barrels	lb.	10 @	11
sulphate, barrels	lb.	3¼@	3¾
Zirconium oxide, kegs	lb.	60 @	75

ACIDS

(Market Report, page 69)

Acetic, 28 p.c., barrels	100 lbs.	3.38 @	3.63
30 p. c., barrels	100 lbs.	5.48 @	5.73
56 p. c., barrels	100 lbs.	6.78 @	7.13
60 p.c., redistilled, barrels	100 lbs.	9.58 @	9.83
80 p. c., pure, barrels	100 lbs.	11.41	@11.66
glacial, 99 p.c., barrels	100 lbs.	12.78	@13.03
carboys		13.28	@13.53
anhydride, 85 p.c., drums	lb.	39 @	40
carboys	lb.	40 @	41
92 p.c., carboys	lb.	42 @	45

Acetylsalicylic, bulk—See Aspirin, Drugs and Fine Chemicals—Page 4.

COAL TAR PRODUCTS

BASIC PRODUCTS

(Market Report, page 73)

Anthracene, 80@85 p.c., barrels	lb.	75 @	80
40@45 p.c., barrels	lb.	12 @	15
20@25 p.c., barrels	lb.	5 @	10
Benzene (benzol), C. P., tanks, works, shipment	gal.	27 @	32
drums	gal.	32 @	37
90 p. c., tanks, works, shipment	gal.	25 @	30
drums	gal.	30 @	35
Carbazole, barrels	lb.	75 @	80
Creosote oil, 25 p. c., drums, gal.		34 @	36
15 p. c., drums	gal.	24 @	26
Cresol, U.S.P., drums	lb.	25 @	30
Cresylic acid, 97@99 p. c., drums, works	gal.	1.00 @	1.05
imported	gal.	74 @	85
95@97 p.c., drums, works	gal.	95 @	1.10
Dip oil, 25 p. c., drums	gal.	25 @	30
Naphthalene, ball, barrels	lb.	8 @	8½
flake, barrels	lb.	6¾@	7¼
crushed, bags	lb.	5¾@	6
crude, bags	lb.	2 @	4
Ortho-cresol, drums	lb.	30 @	34
Phenol, U.S.P., drums	lb.	28 @	30
Pyridine, drums	gal.	4.00 @	4.50
Solvent naphtha, water white, tanks, contracts, works	gal.	27 @	—
drums, contracts, works	gal.	32 @	—
crude, tanks, contracts, works	gal.	24 @	—
drums, contracts, works	gal.	28 @	—
Toluene, C.P., tanks, contracts, works	gal.	30 @	—
drums, contracts, works	gal.	35 @	38
Xylene, C.P., contracts, works, drums	gal.	65 @	—
drums, spot	gal.	75 @	—
commercial, contracts, works, tanks	gal.	29 @	—
drums	gal.	34 @	—

COAL-TAR ACIDS

(Market Report, page 74)

Anthranilic, refined, barrels	lb.	1.20 @	1.25
technical, barrels	lb.	95 @	1.00
Benzoic, U.S.P., kegs	lb.	85 @	90
technical, kegs	lb.	65 @	70
Beta-naphthylamine-1-sulfonic, barrels	lb.	2.30 @	2.35
Broenner's, barrels	lb.	1.50 @	1.55
Cleve's, barrels	lb.	1.00 @	1.15
Cresotinic, kegs	lb.	None	
Gamma, barrels	lb.	1.50 @	1.60
H, barrels	lb.	75 @	80
Laurent's, barrels	lb.	90 @	95
Naphthionic, ref., barrels	lb.	65 @	70
crude, barrels	lb.	55 @	60
Neville & Winther's, barrels	lb.	1.15 @	1.25
Picramic, kegs	lb.	65 @	70
Picric, kegs	lb.	20 @	25
Salicylic, U.S.P., barrels	lb.	35 @	40
technical, barrels	lb.	30 @	33
Sulfanilic, barrels	lb.	17 @	20

INTERMEDIATES

(Market Report, page 74)

Alpha-naphthol, refined, barrels	lb.	85 @	90
crude, barrels	lb.	60 @	80
Alpha-naphthylamine, barrels	lb.	35 @	37
Aminoazobenzene, barrels	lb.	1.15 @	1.20
Aniline oil, drums	lb.	16½@	17
tanks, works	lb.	16 @	16½
for red, drums	lb.	40 @	45
salt, barrels	lb.	24 @	25
Anthraquinone, 95 p. c. subl., kegs	lb.	85 @	1.00
25 p. c. paste, drums	lb.	70 @	75
Benzaldehyde, F.F.C., drums	lb.	1.75 @	1.85
U.S.P., carboys	lb.	1.50 @	1.60
technical, carboys	lb.	75 @	80
Benzidene, base, barrels	lb.	80 @	84
sulphate, barrels	lb.	75 @	80
Benzoyl chloride, drums	lb.	1.00 @	1.15
Benzyl chloride, 95@97 p. c., refined, drums	lb.	40 @	—
crude, drums	lb.	30 @	—
Beta-naphthol, subl., barrels	lb.	55 @	60
crude, barrels	lb.	21 @	23
Beta-naphthylamine, sub., kegs,	lb.	1.35 @	1.35
technical, kegs	lb.	72 @	80
Chloro-benzene, drums	lb.	9 @	11
Dianisidine, barrels	lb.	4.60 @	4.75
Diethyl-aniline, drums	lb.	60 @	65
Dimethyl-aniline, drums	lb.	41 @	43
Dinitro-benzene, barrels	lb.	18 @	20
Dinitro-chloro-benzene, iron barrels	lb.	22 @	24
Dinitro-naphthalene, kegs	lb.	35 @	40
Dinitro-phenol, barrels	lb.	38 @	40
Dinitro-toluene, drums	lb.	18 @	20
Diphenyl-amine, barrels	lb.	48 @	50
Ethyl benzyl aniline, drums,	lb.	1.25 @	1.45
Ethyl bromide, technical, drums,	lb.	40 @	42
G salt, barrels	lb.	60 @	65
Meta-nitro-aniline, kegs	lb.	72 @	75
Meta-nitro-para-toluidine, barrels	lb.	2.25 @	2.30
Meta-phenylenediamine, kegs	lb.	90 @	1.00
Meta-toluylenediamine, kegs	lb.	85 @	90
Michler's ketone, kegs	lb.	3.00 @	3.10
Mixed toluidines, drums	lb.	37 @	40
Mono-chloro-benzene, drums	lb.	9 @	10
Mono-ethyl-aniline, drums	lb.	1.00 @	—
Nitro-benzene, drums	lb.	10 @	12
Ortho-amino-phenol, barrels	lb.	2.40 @	2.50
Ortho-dichloro-benzene, drums	lb.	15 @	18
Ortho-nitro-chloro-benzene, kegs,	lb.	35 @	40
Ortho-nitro-phenol, kegs	lb.	1.30 @	1.35
Ortho-nitro-toluene, drums	lb.	10 @	12
Ortho-toluene-sulphonamide, kegs	lb.	2.00 @	—
Ortho-toluidine, drums	lb.	18 @	20
Para-amino-acetanilide, kegs	lb.	1.20 @	1.25
Para-amino-phenol, base, barrels	lb.	1.35 @	—
hydrochloride, barrels	lb.	1.55 @	—
Para-dichloro-benzene, kegs	lb.	17 @	18
Para-nitro-acetanilide, kegs	lb.	55 @	60
Para-nitro-aniline, kegs	lb.	72 @	75
Para-nitro-chloro-benzene, kegs,	lb.	20 @	25
Para-nitro-phenol, kegs	lb.	65 @	70
Para-nitro-toluene, kegs	lb.	55 @	60
Para-phenylenediamine, barrels,	lb.	1.40 @	1.45
Para-toluene sodium sulphonate, kegs	lb.	8 @	10
Para-toluene-sulphonamide, barrels	lb.	40 @	42
Para-toluidine, casks	lb.	95 @	1.00
Para-nitro-ortho-toluidine, kegs,	lb.	2.75 @	2.80
Phenyl-alpha-naphthylamine, barrels	lb.	2.50 @	2.60
Phthalic anhydride, barrels	lb.	25 @	28
R salt, barrels	lb.	50 @	55
Resorcinol, tech., cans	lb.	1.40 @	1.50
Schaeffer's salt, kegs	lb.	50 @	55

(Continued on page 8)

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Sodium metanilate, kegs	lb.	85 @	90
naphthionate, bottles	lb.	60 @	62
picramate, kegs	lb.	60 @	62
Thiocarbanilide, kegs	lb.	35 @	40
Tolidine, base, kegs	lb.	95 @	1.00
sulphate, kegs	lb.	1.00 @	1.05
Xylidines, drums	lb.	47 @	48

COAL TAR COLORS

ACID COLORS

Blacks

Alizarine, RB, barrels	lb.	2.25 @	2.50
4 AN, barrels	lb.	1.00 @	1.10
4 BX, barrels	lb.	90 @	1.00
Naphthylamine, 4 B, barrels	lb.	50 @	55
10 B, barrels	lb.	60 @	75
"V"		1.00 @	—
PX, barrels	lb.	95 @	1.00
PXS, barrels	lb.	1.00 @	1.10
10 BN, barrels	lb.	85 @	1.00

Blues

Alkali, barrels	lb.	3.15 @	3.50
Black, conc., barrels	lb.	60 @	75
Black, ex. conc., barrels	lb.	1.00 @	1.25
Cyanine B, barrels	lb.	70 @	1.00
R, barrels	lb.	3.00 @	3.25
Fast, FS, barrels	lb.	90 @	1.00
RBS, barrels	lb.	2.75 @	3.00
G, barrels	lb.	2.50 @	3.25
I, barrels	lb.	3.00 @	3.25
Indigotine, barrels	lb.	2.00 @	2.10
Induline, barrels	lb.	75 @	.80
Navy G, barrels	lb.	60 @	1.50
R, barrels	lb.	60 @	1.75
Patent, barrels	lb.	3.50 @	4.00
Silk S, barrels	lb.	4.25 @	4.50
Soluble G, barrels	lb.	3.00 @	3.50
R, barrels	lb.	3.50 @	5.00
Sulphon cyanine 5R, barrels	lb.	80 @	1.35
2 R, barrels	lb.	1.00 @	1.10

Browns

Fast R, barrels	lb.	1.25 @	1.40
Resorcin, barrels	lb.	80 @	90

Greens

B, barrels	lb.	1.60 @	1.75
G, barrels	lb.	3.00 @	3.50
Naphthol B, barrels	lb.	1.40 @	1.50
Wool G, barrels	lb.	2.75 @	3.50
BS, barrels	lb.	1.00 @	2.00
S, barrels	lb.	1.00 @	1.15

Oranges

A, barrels	lb.	30 @	32
G, barrels	lb.	60 @	75
S, barrels	lb.	32 @	34
Y, barrels	lb.	35 @	40

Reds

Acid, barrels	lb.	85 @	—
Amaranth, barrels	lb.	80 @	1.10
Azo crimson I, barrels	lb.	1.00 @	1.50
cochineal, barrels	lb.	1.00 @	2.00
cosine G, barrels	lb.	1.75 @	2.00
2 B, barrels	lb.	1.70 @	1.90
fuchsine 6 B, barrels	lb.	75 @	1.00
G A, barrels	lb.	1.00 @	1.25
Bordeaux B, barrels	lb.	70 @	90
phloxine G, barrels	lb.	1.00 @	1.25
rubine, barrels	lb.	1.00 @	1.25
R, barrels	lb.	85 @	1.10
Brilliant scarlet 3RC, barrels	lb.	85 @	90
Carmoisine H, barrels	lb.	85 @	1.05
Claret 4 B, barrels	lb.	3.25 @	3.50
Crocein scarlet, barrels	lb.	1.15 @	1.30
Eosine B, barrels	lb.	3.75 @	4.00
Y, barrels	lb.	2.70 @	2.75
Erythosine, barrels	lb.	7.50 @	8.00
Fast crimson, 4 B, barrels	lb.	2.50 @	2.75
red A, barrels	lb.	75 @	80
red E, barrels	lb.	85 @	90
red 2 B, barrels	lb.	1.75 @	2.00
red 6 B, barrels	lb.	2.50 @	3.00
Fuchsine, 2B, barrels	lb.	1.00 @	1.25
lana B, barrels	lb.	1.25 @	1.50
Pink, barrels	lb.	5.50 @	6.00
Ponceau 2 R, barrels	lb.	55 @	65
Rocceline, barrels	lb.	75 @	85
Scarlet 2 R, barrels	lb.	55 @	65
4 R, barrels	lb.	80 @	85
YY, barrels	lb.	1.10 @	1.25
5 BX, barrels	lb.	1.95 @	2.10
2 BX, barrels	lb.	2.10 @	2.25

Violets

3 B, barrels	lb.	3.00 @	3.50
4 B	lb.	3.00 @	3.50
5 B conc., barrels	lb.	1.70 @	—
R, barrels	lb.	3.50 @	3.75
6 R, barrels	lb.	1.60 @	1.75
10 B, barrels	lb.	1.50 @	1.60

Yellows

Azo, barrels	lb.	1.35 @	1.40
Fast light 2 G, barrels	lb.	3.00 @	3.25
Metanil, barrels	lb.	80 @	90
Naphthol S, barrels	lb.	1.35 @	1.40
R, barrels	lb.	1.55 @	1.65
Tartrazine, barrels	lb.	85 @	1.50
2 G, barrels	lb.	3.00 @	3.25

BASIC COLORS

Blacks

Basic, barrels	lb.	2.25 @	2.50
Blue water sol., barrels	lb.	70 @	75
spirit sol., barrels	lb.	70 @	75
oil sol., barrels		1.00 @	—
Nigrosine jet, water sol., barrels	lb.	65 @	70
spirit sol., barrels	lb.	70 @	75
oil sol., barrels	lb.	70 @	90

Blues

Indoline, barrels	lb.	1.25 @	1.50
Marine, barrels	lb.	1.50 @	2.00
Methylene, ex. conc., barrels	lb.	1.50 @	1.60
2 B, barrels	lb.	1.40 @	1.75
Naphthol, barrels	lb.	2.75 @	3.00
Navy, barrels	lb.	2.75 @	3.00
Victoria B, barrels	lb.	3.50 @	4.00
crystal, barrels	lb.	6.00 @	6.75
base, barrels	lb.	4.00 @	4.50

Browns

Bismarck R, barrels	lb.	60 @	70
Patent phosphine G, barrels	lb.	2.50 @	3.50
Y, barrels	lb.	65 @	70

Greens

Basic, barrels	lb.	2.50 @	3.00
Malachite crystals, barrels	lb.	1.60 @	1.75
powder, barrels	lb.	1.60 @	1.75
Victoria G, barrels	lb.	2.50 @	3.00

Oranges

Orange basic, barrels	lb.	2.50 @	3.00
Chrysoidine R, barrels	lb.	65 @	75
Y, barrels	lb.	65 @	70

Reds

Fuchsine, crystals, barrels	lb.	3.00 @	3.50
powdered, barrels	lb.	2.75 @	3.00
Rhodamine B, barrels	lb.	2.00 @	—
B ex. conc., barrels	lb.	8.00 @	8.50
6 G, barrels	lb.	3.50 @	4.00
Safranine B, barrels	lb.	2.50 @	3.25
Y, barrels	lb.	2.70 @	3.00
2 Y, barrels	lb.	3.50 @	3.75

Violets

Methyl base, conc., barrels	lb.	2.10 @	2.25
2 B, barrels	lb.	3.00 @	3.25
3 B, barrels	lb.	1.75 @	2.00
Yellow auramine O, barrels	lb.	1.25 @	1.35

CHROME COLORS

Blacks

A paste, drums	lb.	2.00 @	2.50
A, barrels	lb.	1.25 @	1.30
BCA, barrels	lb.	1.90 @	2.00
BCA paste, drums	lb.	2.10 @	2.40
2 B, barrels	lb.	1.25 @	1.30

Blues

Alizarine brilliant, barrels	lb.	2 75 @	3.00
Anthracene WR, barrels	lb.	6.00 @	6.25

Black, barrels	lb.	88 @	90
Black, conc., barrels	lb.	70 @	1.00
Cyanine R, barrels	lb.	1.10 @	1.20
R ex. conc., barrels	lb.	1.40 @	1.50
RV, barrels	lb.	1.25 @	—
B, barrels	lb.	2.00 @	2.25
BV, barrels	lb.	2.00 @	—
RRV, barrels	lb.	1.15 @	—
Gallocyanine BR, barrels	lb.	2.25 @	2.50
G ex., barrels	lb.	2.00 @	2.25
RB ex., barrels	lb.	2.00 @	2.25

Browns

Anthracene (acid), barrels	lb.	1.75 @	2.00
B ex., barrels	lb.	1.60 @	1.70
Chrome, barrels	lb.	1.50 @	1.65
R, barrels	lb.	1.35 @	1.40

Greens

Acid, barrels	lb.	2.25 @	2.50
Alizarine brilliant G, barrels	lb.	— @	—
Chrome, barrels	lb.	1.50 @	2.50
G, barrels	lb.	1.50 @	1.75
N, barrels	lb.	1.75 @	1.80
Supra, barrels	lb.	1.75 @	2.00
2 B, barrels	lb.	2.75 @	3.00
Orange 2 G, barrels	lb.	95 @	1.00

Reds

Alizarine wine, barrels	lb.	2.00 @	2.10
Bordeaux, barrels	lb.	1.30 @	1.50
4 B, barrels	lb.	2.10 @	2.25
2 B, barrels	lb.	1.75 @	2.00
Violet chrome, barrels	lb.	2.75 @	3.00

Yellows

Alizarine 2 G, barrels	lb.	80 @	85
Alizarine R, barrels	lb.	1.10 @	1 25
Chrome, barrels	lb.	60 @	75
Flavine, barrels	lb.	1.00 @	—
G, barrels	lb.	65 @	70
S G, barrels	lb.	1.00 @	1.15
2 R, barrels	lb.	90 @	1.00

DIRECT COLORS

Blacks

Developed, barrels	lb.	80 @	85
S, barrels	lb.	1.50 @	1.75
C, barrels	lb.	1.00 @	1.25
Diazo RS, barrels	lb.	50 @	75
Direct, barrels	lb.	40 @	60
Union, barrels	lb.	60 @	75

Blues

Benzo azurine G, barrels	lb.	75 @	80
sky FF, barrels	lb.	1.30 @	1.50
Brilliant G, barrels	lb.	1.70 @	—
Cotton, barrels	lb.	5.00 @	5.50
Diamil G, barrels	lb.	2.75 @	3.00
Fast RW, barrels	lb.	1.75 @	2.00
G, barrels	lb.	1.00 @	1.10
Navy B, barrels	lb.	1.60 @	2.00
R, barrels	lb.	1.50 @	2.00
Sky, barrels	lb.	1.15 @	1.25
B, brarels	lb.	2.75 @	3.50
3 B, barrels	lb.	50 @	75
2 B, barrels	lb.	45 @	55
Steel G, conc., barrels	lb.	1.50 @	2.00
Union bright G, barrels	lb.	3.00 @	3.25
dark, barrels	lb.	2.25 @	—
navy, barrels	lb.	2.25 @	—

Browns

C, barrels	lb.	65 @	75
Direct, barrels	lb.	1.75 @	1.95
Fast M, barrels	lb.	1.10 @	1.25
GB, ex., barrels	lb.	1.10 @	1.25
Benzo, barrels	lb.	2.25 @	3.00
Khaki, barrels	lb.	1.25 @	1.30
Tan, barrels	lb.	1.80 @	—
Union R, barrels	lb.	2.75 @	—
tan, barrels	lb.	3.00 @	—

Grays

Direct, barrels	lb.	90 @	1.00
Fast silk, barrels	lb.	1.75 @	2.00
Neutral G, barrels	lb.	2.00 @	2.25
Union, barrels	lb.	2.25 @	—

Greens

B, barrels	lb.	75 @	80
Diamine, barrels	lb.	1.50 @	1.65
G, barrels	lb.	1.25 @	1.75
2 G, barrels	lb.	1.50 @	1.75
Union dark, barrels	lb.	2.50 @	—
B, barrels	lb.	2.75 @	—
Y, barrels	lb.	2.75 @	—
WD, barrels	lb.	1.50 @	1.60
Y, barrels	lb.	1.50 @	1.60

Mauves

B, barrels	lb.	1.75 @	—
R, barrels	lb.	1.75 @	—

Oranges

A conc., barrels	lb.	1.50 @	1.75
Benzo fast, barrels	lb.	2.25 @	2.50
Direct, barrels	lb.	90 @	1.00
G, barrels	lb.	1.75 @	1.85
2 R, barrels	lb.	1.35 @	1.50
R, barrels	lb.	75 @	90
Union R, barrels	lb.	2.50 @	—
Y, barrels	lb.	1.00 @	1.10

Pinks

B, barrels	lb.	2.00 @	—
Diamine fast G, barrels	lb.	4.50 @	4.75
fast 3 B, barrels	lb.	5.00 @	5.15
Ex. conc., barrels	lb.	1.75 @	1.90
2 B, barrels	lb.	2.00 @	2.50
Union 2 B, barrels	lb.	3.50 @	—
Y, barrels	lb.	3.00 @	3.25
Y, barrels	lb.	1.75 @	2.00

Reds

Benzo purpurine 4 B, barrels	lb.	60 @	65
4 B conc., barrels	lb.	95 @	1.00
10 B conc., barrels	lb.	1.30 @	1.50
Bordeaux, barrels	lb.	1.75 @	1.80
Congo R, barrels	lb.	50 @	60
4 B conc., barrels	lb.	45 @	50
Developed primuline, barrels	lb.	1.00 @	—
Direct, fast, barrels	lb.	3.00 @	3.50
Fast F, barrels	lb.	1.10 @	1.25
Garnet R, barrels	lb.	1.75 @	1.80
Union bright 4 B, barrels	lb.	2.00 @	—
deep 8 B, barrels	lb.	3.50 @	—
wine, barrels	lb.	3.00 @	—

Violets

B, barrels	lb.	1.00 @	1.30
Brilliant R, conc., barrels	lb.	1.10 @	1.25
R, barrels	lb.	1.75 @	2.25
N, barrels	lb.	1.10 @	1.20

Yellows

Chloramine, barrels	lb.	1.50 @	2.50
Chrysamine, barrels	lb.	1.00 @	1.25
G, barrels	lb.	1.05 @	1.25
Chrysophenine G, barrels	lb.	90 @	95
Diamine, barrels	lb.	1.50 @	1.60
F, barrels	lb.	2.00 @	2.50
Fast N, barrels	lb.	2.00 @	2.25
G, barrels	lb.	1.25 @	1.50
R, barrels	lb.	1.25 @	1.50
Stilbene, barrels	lb.	75 @	Nom
Union R, barrels	lb.	3.00 @	—

MISCELLANEOUS COLORS

Black fur, barrels	lb.	2.50 @	2.75
Oil, barrels	lb.	90 @	—
Oil base, barrels	lb.	1.40 @	—
Blue fur, barrels	lb.	2.85 @	3.00
Ink, barrels	lb.	9.00 @	—
black, barrels	lb.	2.25 @	—
Oil, barrels	lb.	1.25 @	—
B, barrels	lb.	2.50 @	2.75
Brown ink, barrels	lb.	2.75 @	3.00
Oil, barrels	lb.	1.20 @	1.50
mahogany, barrels	lb.	1.40 @	1.50
Green oil, barrels	lb.	4.25 @	5.00
Orange oil, barrels	lb.	1.25 @	—
Red oil, barrels	lb.	1.20 @	1.30
Violet oil, barrels	lb.	1.15 @	1.75
Yellow oil, barrels	lb.	1.10 @	1.20

SULPHUR COLORS

Black sulphur, barrels	lb.	20 @	30
S conc., barrels	lb.	49 @	60

Blue indigo, barrels	lb.	1.00 @	1.10
Sulphur blue, barrels	lb.	45 @	80
2 F, barrels	lb.	1.25 @	1.30
Brown khaki, barrels	lb.	16 @	20
Sulphur, barrels	lb.	25 @	35
2 G, barrels	lb.	70 @	80
Green olive, barrels	lb.	75 @	—
Sulphur, barrels	lb.	95 @	1.00
Yellow sulphur, barrels	lb.	65 @	75

VAT COLORS

Indigo, 20 p. c., paste, drums	lb.	26 @	28½
Yellow R, drums	lb.	3.00 @	3.75

IMPORTED COLORS

MISCELLANEOUS COLORS

Blues

Alizarine black B, Swiss		1.10 @	1.15
Patent Swiss		10.00 @	12.00

Greens

W. Swiss		3.50 @	4.00
Wool S. Swiss		3.50 @	4.00

Reds

Alizarin red, Swiss, paste, 20%		42 @	44
Rhodamine B, Swiss		5.00 @	—
B ex. conc		17.00 @	20.00
6 G		5.25 @	—
Rocceline, Swiss		2.00 @	2.25

Yellows

Auramine 00, Swiss		1.90 @	2.00
0		4.00 @	5.00
Tartrazine, Swiss		2.25 @	2.50

VAT COLORS

Blues

Algol, powder, German		3.00 @	—
paste		1.15 @	—
Indanthrene, German		1.00 @	1.50

Browns

Anthracene, German		6.00 @	8.00

Red

Anthracene, German		5.50 @	7.00

Violets

Algol, powder, German		16.00 @	—
paste, German		1.75 @	2.00

DYESTUFFS AND TANSTUFFS

NATURAL DYESTUFFS

(Market Report, page 77)

Albumen, egg, edible, kegs	lb.	1.05 @	1.10
technical, kegs	lb.	None	
blood, barrels	lb.	45 @	50
Annatto, fine, boxes	lb.	34 @	36
seed, boxes	lb.	16 @	17
Cochineal, Teneriffe, silver, bags	lb.	32 @	33
gray, black, bags	lb.	32 @	33
Cutch, Borneo, bales	lb.	4 @	4½
Rangoon, bales	lb.	15 @	16
Dextrine, corn, bags	100 lbs.	3.69 @	3.86
gum, British, bags	100 lbs.	3.99 @	4.26
potato, domestic, bags	lb.	7½@	8
imported, bags	lb.	7½@	8
Divi divi, bags	ton.	39.00 @	40.00
Egg yolk, granular, kegs	lb.	45 @	50
soluble, kegs	lb.	55 @	60
Gambier, common, bags	lb.	8 @	8½
plantation, bags	lb.	9½@	10
Singapore, cubes, bags	lb.	None	
Indigo, Madras, barrels	lb.	85 @	90
Manila, barrels	lb.	1.80 @	—
Madder, Dutch, bags	lb.	27 @	29
Myrobalans, bags	ton.	27.00 @	36.00
Nutgalls, Aleppo, bags	lb.	16 @	17
Chinese, bags	lb.	11 @	12½
Sago flour, bags	lb.	3½@	4
Starch, corn, pearl, bags	100 lbs.	3.22 @	3.49
powdered, bags	100 lbs.	3.12 @	3.39
potato, domestic, bags	lb	4½@	5
imported, bags	lb.	5 @	5½
rice, bags	lb.	9 @	12
wheat, bags	lb.	6 @	7
Sumac, leaves, Sicily, bags, ship.	ton.	85.00 @	—
ground, bags	ton.	85.00 @	—
domestic, bags	ton.	40.00 @	45.00
Taploca flour, bags	lb.	5½@	6
Turmeric—See Roots, Page 5.			
Valonia, beards, 40 p. c., bags,	ton.	50.00 @	—
cups and beards	ton.	40.00 @	—

DYEWOODS

(Market Report, page 78)

Brazil-wood, pieces, shipm't	ton.	35.00 @	—
Camwood, bark, ground, barrels,	lb.	18 @	20
Cuba-wood—See Fustic.			
Fustic, sticks, pieces, shipm't	ton.	30.00 @	35.00
chips, bags	lb.	4 @	5
Hypernic—See Brazil Wood.			
Logwood, Haitian, chips, bags	lb.	2½@	3½
sticks, pieces	ton.	25.00 @	28.00
Red sanders, bark, ground (barwood), barrels	lb.	18 @	20

CHEMICALS

(Market Report, page 77)

Aluminum chloride, 33@33 p. c., drums	lb.	3½@	4
Antimony salt, 75 p. c., tins	lb.	Nominal	
65 p. c., tins	lb.	22 @	25
Indigo, synthetic, 20% paste—See Coal-Tar Colors—Page 8.			

FERTILIZER MATERIALS

AMMONIATES

(Market Report, page 47)

Ammonia, sulphate, bulk, f.o.b. works	100 lbs.	3.20 @	3.25
resale		3.00 @	3.10
contract		3.00 @	3.15
double bags, f.a.s., New York		3.40 @	3.45
resale		3.25 @	3.35
Blood, dried, bulk, 15@17 per cent. ammonia, f.o.b. New York	unit	Nominal	
South American, to arrive		4.00 @	4.10
high grade, ground, Chicago, bulk	unit	4.00 @	4.15
Cottonseed meal, 7 per cent. ammonia, f.o.b. mills, bags	ton.	34.00 @	36.00
Fish, scrap, dried, bulk, 11 per cent. ammonia and 15 per cent. bone phosphate, f.o.b. fish factory	unit	3.85 &	10
ground, bulk, 11@12 per cent. ammonia, 15 per cent. bone phosphate, f.o.b. Baltimore,	ton	4.30 @	10
wet, acidulated, bulk, 6 per cent. ammonia, 3 per cent. phosphoric acid, f.o.b. fish factories	unit	2.75 &	50
Hoof meal, f.o.b. Chicago, bulk,	unit	3.00 @	3.15
imported	unit	3.50 @	—
Lime, nitrate, barrels, long	ton.	50.00 @	58.00
Soda, nitrate, spot, bags	100 lbs.	2.40 @	2.42
September-October		2.42 @	—
November-December		2.43 @	2.45
January		2.50 @	—
February		2.52½@	—
March		2.55 @	—
April-May-June		2.57½@	—
Tankage, ground or screened, 10 and 15 per cent., New York, bulk	unit	3.55 &	10
11 and 15 per cent., Chicago,	unit	3.25 &	10
concentrated, 14 to 15 per cent. Chicago, bulk	unit	2.75 @	3.00
unground, New York, bulk	unit	3.30 &	10
garbage, Chicago, bulk	ton	6.00 @	6.50

PHOSPHATES

(Market Report, page 48)

(Quotations, per ton, in bulk)

Acid, phosphates, basis 16 per cent., bulk, f.o.b. Baltimore		8.00 @	8.50
resale		7.50 @	8.00
Bones, rough, hard, f.o.b. Chicago		24.00 @	25.00
soft steamed, unground, f.o.b. Chicago		17.00 @	20.00
ground, steamed, 1¼ per cent. ammonia and 60 per cent. bone phosphate, f.o.b. Chicago		22.00 @	24.00
do., 3 and 50 per cent., f.o.b. Chicago		26.00 @	—
raw, ground, 4 per cent. ammonia and 50 per cent. bone phosphate, f.o.b. Chicago		25.00 @	28.00
bone meal (3 per cent. ammonia and 50 per cent. bone phosphate), f.o.b. New York		32.00 @	—
South American, to arrive		32.00 @	—
Florida land pebble phosphate rock, 68 per cent. min., f.o.b. mines		3.25 @	—
70 per cent., f.o.b. mines		3.55 @	—
72 per cent., f.o.b. mines		3.85 @	—
basis 75 per cent., 74 per cent., min., f.o.b. mines		4.50 @	—
75 per cent min., f.o.b. mines		5.00 @	—
basis 77 per cent., 76 per cent. min., f.o.b. mines		7.00 @	—
Florida high grade phosphate hard rock, 77 per cent., f.o.b. mines		7.60 @	—
Tennessee phosphate rock, f.o.b. Mt. Pleasant, domestic 75 per cent.		7.50 @	Nom
72 per cent		6.50 @	Nom
70 per cent		5.50 @	Nom

POTASHES

(Market Report, page 48)

Kainit, 14@16 per cent., bulk	ton.	7.33½@	—
12.4 per cent., bulk	ton	6.50 @	—
Manure salts, 20 per cent., bulk,	ton	9.44½@	—
30 per cent., bulk	ton.	15.33 @	—
double, 48 per cent., bags	ton.	23.15 @	—
Muriate, 80@85 per cent., bags,	ton.	31.09½@	—
Sulphate, 90@95 per cent., basis 90 per cent., bags	ton.	39.30 @	—

(The foregoing are importers' prices to group buyers.)

PYRITES

(Market Report, page 48)

(Quotations in bulk)

Domestic concentrates, f.o.b. mill	unit	12½@	Nom
Spanish, crude, lump, averaging 48@50 per cent. of sulphur, c.i.f.	unit	11½@	—
washed fines	unit	10 @	—
furnace size, high grade, practically non-arsenical, less than 1/10 per cent. arsenic,	unit	12½@	—
lump ore, washed, averaging 48@50 per cent. of sulphur,	unit	11 @	—

Calco

NIGROSINE

A Calco Specialty

One of the most important dyestuff units at our Bound Brook plant is the Nigrosine building. When we consolidated our factories and transferred our manufacturing operations from the old Newark site, we had the advantage of many years' experience in manufacturing Nigrosine on which to draw in designing the new unit. Consequently, when this was installed it embodied the latest and most modern methods and machinery, with resulting efficiencies in manufacture and greatly improved quality.

The wide use of Calco Nigrosines in leather, paper, stain, shoe polish and other important industries has caused us to establish numerous different types to take care of the special requirements of each trade. There is a special Calco Nigrosine best suited to your particular needs and our research and application laboratories will be very glad to consult with you and assist in selecting this type.

Why not send your samples for matching or ask us for quotations and product samples? There is absolutely no obligation to you for this service.

THE CALCO CHEMICAL COMPANY
Bound Brook N. J.

New York Boston Philadelphia Chicago

Canadian Representative
DILLONS, Ltd.
Montreal Toronto

COMPARATIVE PRICES

(Continued from Page 8)

CHEMICALS

	1922	1921	1920
Acids—			
acetic, 28 p. c.	$2.25	$2.50	$2.75
glacial	8.50	9.00	12.00
boric lb.	.12½	.12½	.12
citric, cryst.	.47	.47	.74
formic lb.	.18	.18	.22
mixed, No. 1 cwt.	.08½	.10	.04¾
muriatic, 18 deg.	1.00	1.25	1.40
nitric, 40 deg.	6.00	6.50	6.50
32 deg.	6.50	7.00	6.75
oleum, 20 p.c. ton	19.50	25.00	25.00
oxalic, American lb.	.14	.16	.22
picric	.20	.30	.25
phosphoric, 50 per cent, tech. lb.	.12	.15	.14½
sulphuric, 66 deg.	16.00	18.00	22.00
tannic, tech. lb.	.35	.55	.60
tartaric, crystals lb.	.25	.48	.74
tungstic, C.P. lb.	1.10	1.00	1.25
Alum, ammonia, lump	3.50	3.75	4.00
potash, lump lb.	.03½	4.50	3.90
Alumina, sulphate, iron free	2.50	2.75	2.75
Ammonia, aqua, 26 deg.	.07½	.07½	.07½
Ammoniac, sal, lump	.15	.15	.15
white, granular lb.	.07	.09	.08½
Arsenic, white	.10½	.09	.10½
red lb.	.11	.12½	.12½
Barium, chloride, white cryst.	80.00	90.00	90.00
carbonate ton	50.00	55.00	70.00
Bleaching powder, 25 p.c.	1.60	2.50	2.50
Blue vitriol, 99 p.c., cryst.	5.60	5.00	7.00
Brimstone, crude, long ton	14.00	18.00	18.00
Calcium arsenate lb.	.16	.20	.19
carbide 100 lbs.	4.50	4.50	4.50
chloride ton.	25.00	30.50	29.50
Carbon bisulphide lb.	.06	.08½	.08
tetrachloride, drums	.09½	.10	.11
Chlorine gas, liquid	.07	.08	.07
Copper, cyanide lb.	.50	.60	.58
oxide lb.	.16	.18	.16
Copperas cwt.	1.00	1.00	1.50
Ethyl acetate gal.	.70	.65	.60
Fluospar, acid grade, ton.	45.00	45.00	50.00
Glauber's salt	.85	1.50	1.25
Lead acetate, white crystals lb.	.11	.12⅝	.14
Lime, acetate 100 lbs.	1.75	1.50	2.00
Potash, carbonate, calc., 80@85 p.c.	.09	.06½	.15
caustic, 88@92 p.c.	.06	.08	.24
chlorate, cryst.	.06	.07½	.12
permanganate, tech.	.15	.25	.55
Saltpeter, cryst.	.08⅝	.12⅜	.14
Soda ash, light, 50 p.c., bags cwt.	1.80	2.00	2.40
bicarbonate lb.	1.80	1.75	2.25
caustic, solid, 76 p.c.	3.90	3.90	4.50
chlorate	.05¾	.10	.12
nitrate, crystals lb.	.04½	.06	.05½
nitrite lb.	.07½	.12	.18
sel cwt.	1.60	2.00	1.35
silicate, 60 deg.	2.30	2.55	2.75
sulphide, 60 p.c. fused	.08	.04½	.06¾
Tin, crystals lb.	.28	.31	.42
Tin oxide lb.	.35	.45	.50
Zinc carbonate lb.	.14	.19	.16
Zinc dust lb.	.10	.09½	.12
Zinc sulphate	.03	.03¼	.03¼

COAL TAR PRODUCTS

	1922.	1921.	1920.
Benzol gal.	.27	.33	.27
Cresylic acid, 97@99 p.c. gal.	.56	.95	.85
Naphthalene, flake lb.	.08	.10	.06
Phenol, U.S.P. lb.	.12	.12	.12
Toluene, c.p. gal.	.30	..	..
Xylene, c.p. gal.	.45	.45	.38
Anthranilic acid, ref. lb.	1.30	2.00	4.00
Benzoic acid, U.S.P. lb.	.65	.75	.75
H acid lb.	1.00	1.75	1.50
Alpha naphthyl - amine lb.	.30	.30	.32
Aniline oil lb.	.14	.18	.25
Aniline salt lb.	.24	.28	.28
Benzidine, base lb.	1.00	1.25	1.00
Beta naphthol, tech. lb.	.30	.65	.35
Dimethyl aniline lb.	.34	.75	.50
Nitro-benzene lb.	.10	.12	.15
Ortho-amino-phenol lb.	2.20	3.00	3.50
Para-amino-phenol, base lb.	1.20	2.50	2.75
Para-phenylene-diamine lb.	1.60	1.75	2.25
Resorcinol, tech. lb.	1.35	1.70	3.50
Xylidine lb.	.42	.42	.42

DRUGS

	1922.	1921.	1920
Acetanilid, C. P., bbls.	$0.28	$0.29	$0.52
Acetphenetidin	1.85	1.35	2.30
Acetone	.13½	.12½	.21
Alcohol, 190 U.S.P., gal.	4.70	4.70	Nom.
refind, wood, 95 p. c.	.52	.60	3.25
denatured, No. 5	.28	.35	1.12
Amyl acetate lb.	2.00	2.35	4.10
Bismuth subnitrate, powd.	2.30	1.80	2.85
Barium, nitrate	.08	.07¾	.17
Borax cryst., bbls.	.05½	.05½	.08½
Bromine, tech., bulk	.25	.27	.85
Caffeine, alkaloid	3.50	4.75	7.50
Castor oil, AA bbls.	.13	.11	.17
No. 3	.12½	.12	.16
Chloral hydrate	.75	.75	1.05
Chloroform, U. S. P.	.25	.36	.40
Cocaine, cryst.	6.00	6.00	10.50
Codeine, sulphate, 100-oz. lots	5.85	4.80	9.00
Coumarin lb.	3.40	4.35	6.50
Epsom salt, U.S.P. cwt.	2.00	2.75	3.50
Ergot, Spanish lb.	.80	1.30	4.00
Ether, U. S. P.	.17	.19	.23
Fusel oil, crude	1.45	Nom.	Nom.
Glycerine, C. P., bulk, lb.	.17½	.14½	.28½
Guaiacol, carb.	3.25	3.75	6.00
Haarlem oil, gross lots, bot.	3.50	3.00	3.50
Hydroquinone	1.15	1.50	2.25
Iodine, resublimed	4.40	3.50	4.35
Magnesium, carb., U. S. P. bbls.	.13	.13	.18
technical lb.	.09	.10	.12½
Menthol lb.	6.15	4.35	7.25
Morphine, sulphate, bulk, lb.	5.35	4.90	7.80
Oils—			
Codliver, Norwegian bbls.	23.00	16.50	64.00
Opium, U. S. P. lb.	6.25	5.75	7.50
Potassium, bromide, gran.	.15½	.17	.70
iodide	3.45	2.65	3.35
permanganate, U.S.P.	.14	.22	.80
Quicksilver, flasks	65.00	42.00	75.00
Iron, citrate, U.S.P. lb.	.99	.99	1.19
Quinine, sulphate, 100-oz. tins	.50	.70	.90
Rochelle salt, cryst. lb.	.18	.21	4.00
Saccharin	1.85	2.25	3.50
Salol	.80	.60	.95
Sodium, bromide, gran.	.15	.19	.65
benzoate, U.S.P.	.55	.55	.80
salicylate—See Chemicals.			
Strychnine, alkaloid, cryst.	1.05	1.70	1.95
Sugar of milk, pwd. lb.	.19	.17½	.25
Sulphur, roll, brm. cwt.	2.00	2.00	3.45
Tartar emetic, cryst. lb.	.29	.34	.73
Thymol	4.45	5.50	11.50
iodide	6.75	9.00	14.50
Vanillin oz.	.43	.50	.90
Botanicals—			
Agar-agar, No. 1 lb.	1.32	.65	.60
Balm of Gilead, buds	.43	.70	1.40
Cantharides, Chin.	1.00	.75	1.20
Guarana	.60	.80	.95
Irish moss, ord.	.07	.07	.10
Kola nuts, W. I.	.05	.06	.14
Nux vomica, buttons	.06½	.10	.14½
Tamarinds	.04¼	.03½	.08½
kegs, 40 lbs.	3.75	3.00	5.50
Balsams—			
Copaiba, So. Amer.	.29	.31	.57½
Peru	1.65	1.45	3.75
Tolu	.70	.30	.85
Barks—			
Angostura	.14	.24	Nom.
Cascara sagrada	.11	.10	.16
Calisaya	.12	.25	.55
Cinchona, red, quills	.40	.35	.65
Sassafras, ord.	.11	.15	.25
Soap, whole	.06½	.07	.14
Wahoo bark of root	Nom.	.55	.85
Wild cherry, thin	.09	.14	.19
Beans—			
Tonka, Angostura	2.00	.80	1.75
Vanilla, Bourbon, whole	2.65	2.00	3.00
Mexican, whole	11.00	5.00	4.50
Berries—			
Cubebs, ord.	.85	.90	1.30
Juniper	.03	.03¾	.04½
Prickly ash	.11	.12	.12
Flowers—			
Arnica	.08½	.12	.22
Chamomile, Hungarian	.26	.18	.35
Lavender, ord.	.35	.18	.18
Saffron, Valencia	27.00	13.00	14.00
Herbs and leaves—			
Aconite	.18	.27	.65
Belladonna	.11	.17	.30
Buchu, short	.95	.95	3.75
Damiana	.10	.11	.15
Digitalis, domestic	.06½	.11	.22
Henbane	.48	.21	.35
Pennyroyal	.08	.08	.14
Senna, Tinnevelly	.04	.06	.15
Spearmint, American	.22	.25	.30
Roots—			
Aconite, U.S.P.	.23	.22	.55
Belladonna	.12	.18	.45
Blood	.14	.14	.26
Dandelion	.07½	.09	.27
Gentian, whole	.08½	.08	.12½
Hellebore, dom., wh.	.15	.16	.18
Ipecac, Rio, whole	1.55	1.35	3.30
Jalap	.19	.17	.45
Licorice	.06½	.06	.13
Mandrake	.16	.10	.17
Orris, Flor., whole	.07	.09	.14
Poke	.07	.09	.15
Rhubarb, high dried	.49	.23	.75
Sarsaparilla, Mex.	.33	.40	.35
Squills, white	.04	.05	.10
Seeds—			
Anise, Span., bulk	.18½	.14¼	.18
Canary, S. Amer.	.04	.04	.06
Caraway, Dutch	.18½	Nom.	.08
Cardamoms, bleached, decorticated	.68	.65	1.50
	.51	.41	.70
Celery	.20	.14½	.19½
Fennel, French	.11½	.08	.10
Foenugreek	.04¾	.03	.02½
Mustard, Bombay	Nom.	Nom.	.14
California, brown	.07½	.04½	.15
English, yellow	.08	.05¾	.11½
Stramonium	.13	.24	.24
Spices—			
Cassia, Batavia, No. 1	.10½	.10½	.14
Cinnamon, Ceylon, No. 1	.21	.20	.40
Cloves, Zanzibar	.37	.25	.32
Ginger, African No. 1	.09¼	.07½	.11¾
Pimento	.04⅝	.04	.07½
Essential oils—			
Almond, bitter	4.75	6.40	9.00
peach kernel	.25	.29	.45
sweet, true	.48	.45	.65
Lavender flowers	2.75	4.25	9.00
Lemon	.65	.75	1.10
Orange, sweet, Italian	2.75	3.25	6.50
Peppermint, tins	3.10	2.00	6.50
Sandalwood, E. I.	6.75	6.75	11.00
Sassafras, nat., U.S.P.	.85	1.10	1.75
artificial	.45	.55	.75
Wintergreen, gaultheria	4.25	5.50	9.00
synthetic	.39	.31	.80
sweet, birch	2.10	3.00	6.00
Gums—			
Arabic sorts, amber, cleaned	.15½	.10	.15½
Asafœtida, lump	.40	.33	3.30
Camphor, Am., ref., bbls., bulk	.90	.75	1.40
Japanese, ref., 2½-lb. slabs	.83	.70	1.30
Tragacanth, firsts	1.75	3.40	4.60
Waxes—			
Beeswax, African lb.	.22	.16	.23
ref.	.26	.24	.33
Carnauba, No. 3, No Country	.20	.15	.31
Japan	.15½	.25	.17
Shellac, T.N.	.61	.52	.95

DYESTUFFS

	1922.	1921.	1920.
Albumen, egg	$0.70	$0.45	$1.50
Aniline oil	.17	.20	.30
Annatto seed	.04	.04	.07
Antimony salts, 65 p. c.	..	.40	.45
Cochineal, gray, black	..	.40	.65
Cutch, Rangoon bxs.	.08½	.10	.18
Dextrine, corn cwt.	2.45	4.30	6.19
potato, domestic	.08	.07½	.13½
Divi divi ton	..	42.00	60.00
Flavine lb.	.90	.90	.90
Fustic stick ton.	35.00	35.00	38.00
extract, solid lb.	.14	.18	.20
Gambier, common	..	.09	.10
Singapore, cube	..	.08¾	.17
Hematine, crystals	..	.22	.27
Indigo, Manila	1.30	1.50	1.50
Madras	.90	.95	.80
Indigo extract	.15	.15	.15
Logwood, sticks ton.	28.00	30.00	None
crystals	.17	.30	.22
solid, extract	.14¾	.25	.20
Potash, bichromate	..	.13½	.30
prussiate, yellow	..	.26	.24
Sago flour	.03¾	.06	.06½
Soda acetate	.06	.07	.08
bichromate	..	.08¾	.21
prussiate, yellow	.17¾	.40	.33
Starch, corn, bags lb.	1.83	5.12	4.52
Sumac, Sicilian	55.00	90.00	125.00
ext. dom. 51-deg lb.	08	.07½	.06½
Toluol gal.	..	.30	.28
Zinc dust	.	.11¼	.11¾

PAINTS

	1922.	1921.	1920.
Barytes, f.o.b. mills	$23.00	$23.50	$30.00
Blanc fixe, dry, bbls., 600 lbs.	.04¼	.04	.06
Casein lb.	.18	.06¾	.15
Carbon gas, black	.16	.10½	.15
Chrome green, light	.30	.42	.35
Chrome yellow, C. P., light, ton lots lb.	.16½	.22	.28
Iron blue, 500-lb. lots	.55	.50	.95
Lampblack	.14	.10½	.15
Litharge, Amer., pwd., casks, net	.0850	.0825	.1525
Lithopone, bags	.06	.07¾	.06¾
Orange mineral, Amer.	.12	.1175	.1550
Paris green, bulk arsenic, kegs	.20	.29	.36
Red lead, dry, casks	.09	.0875	.1225
Talc, American	18.00	20.00	15.00
Ultramarine blue, bbls. lb.	.08	.10	.15
Umber, Turkey, burnt, powdered, ton lots	.04¼	.05½	.05
Venetian red	.03½	.02	.02½
White lead in oil, less than 500 lbs.	.1250	.13	.1450
dry, casks	.0725	.09	.10
Whiting, com., car lots	1.10	1.15	1.40
Zinc oxide, white seal, lb.	.11	.1225	.1350
35 p.c., lead sulphate	.07	.07¾	.08½

NAVAL STORES

	1922.	1921.	1920.
Rosin, common to good strained 280 lbs.	$5.30	$5.30	$18.50
large, Florida, good W. W. 280 lbs.	7.25	6.75	22.45
Rosin oil, 1st rect. gal.	.37	.40	.90
4th rect.	.52	.65	1.15
Turpentine spirits gal.	.97	.67	2.35
wood, dest., dis. gal.	.75	.52	Nom.
Tar oil, com. gal.	.30½	.35	.34
Pine oil, stm. dist., under 933 sp. gal.	.95	1.25	1.35
Pitch bbl.	6.00	6.00	8.50
Tar, kiln burned bbl.	10.00	12.75	14.50
retort	9.00	13.00	15.00

FERTILIZERS

	1922.	1921.	1920.
Potash, muriate, basis 80 p. c., bags ton	$32.95	* $0.85	* $2.40
Phosphate acid, bulk	8.50	12.00	21.00
rock, Florida land pebbles, 68 p. c.	2.75	5.00	6.85
Tennessee, 75 p. c.	7.00	15.00	7.50
Ammonia, sulphate of, bulk, works cwt.	3.45	2.00	5.50
fish scrap, wet, acidulated, factory unit	3.50	2.25	7.00
Soda, nitrate, 95 p.c. cwt	2.65	2.70	2.85
Pyrites, domes., mills, unit.	Nom.	Nom.	.27
Spanish, crude	.11½	.14	.17½

* Unit.

OILS

	1922.	1921.	1920.
Animal oils—			
Degras, American lb.	$0.04¼	$0.05	$0.07½
Lard, prime, winter, edible gal.	14.62½	1.30	1.90
off prime gal.	11.75	1.06	1.80
Neatsfoot, 20-deg. cold test	18.25	1.12	2.10
prime	10.00	.92	1.80
Oleo, value grade lb.	.08	.06¾	.18
Red, elaine lb.	.08½	.07	.17¼
saponified lb.	.08½	.07¼	.17¼
Stearic acid, single pressed lb.	.09	.08¾	.23½
Fatty acids—			
Soya bean lb.	09	.06	.14½
Coconut lb.	08¼	.05½	.14½
Corn lb.	08	.05¼	Nom.
Cottonseed lb.	08¼	.05¼	.14
Fish—			
Cod, Newf'dland gal.	58	.48	1.17
Menhaden, So., crude, fac. gal.	.40	.25	.90
dark, pressed gal.	.59	.36	Nom.
Sperm, bleached, winter, 38 deg. cold test gal.	1.62	1.70	1.98
Whale, bleached, winter gal.	.75	.85	1.37
Vegetable oils—			
China wood lb.	.13½	.09¼	.34
Coconut, Ceylon, domestic	.08¾	.09¼	.19¼
Copra, South Sea, sun dried lb.	.04¾	.04¼	.09¾
Corn, crude lb.	11.25	7.75	17.31
refined lb.	12.99	9.76	19.50
Cottonseed, crude lb.	10.00	4.25	16.00
prime sum'r yellow	11.50	5.90	18.50
Linseed, raw, car lots, gal.	.90	.71	1.67
boiled, car lots gal.	.92	.73	1.69
refined, car lots gal.	.94	.75	1.71
Olive, edible gal.	1.80	1.80	3.05
denatured gal.	1.12	1.50	2.85
Palm, Lagos lb.	.07¾	.06½	.15½
Niger	.06¼	.06½	.14
Palm kernel lb.	.08¾	.09¼	.20
Peanut, dom., ref. lb.	.13	.11	.35
crude, mills, buyers, tanks gal.	.09¾	.05½	Nom.
Oriental, coast, sellers' tanks lb.	Nom.	.06	.16¼
Rapeseed, refined gal.	.83	.86	1.64
blown gal.	.92	.85	1.78
Soya bean, sellers, tanks, Coast lb.	.09½	.07	.13¾
refined lb.	.11¾	.09	.20
Greases, lard, stearines and tallow—			
Grease, brown lb.	.05	.02¼	.15½
house lb.	.05¼	.03½	.13
Lard, city steam lb.	.10¾	.09¾	.19¼
compound lb.	.12¾	.08	.21½
neutral lb.	.12¼	.13¼	.30
Stearin, lard lb.	.13	.03	.27
oleo lb.	.08¾	.06½	.16¼
Tallow, city, special, loose lb.	.06½	.05¼	.14¼
edible lb.	.08½	.06	.15¼

OIL CAKE

	1922.	1921.	1920.
*Coconut cake ton.	$24.00	$10.00	Nom.
Cottonseed, mills ton.	Nom.	26.00	$76.00
Linseed ton.	48.00	46.00	59.00

*F.o.b. Pacific Coast.

BUYERS AND SELLERS READY REFERENCE, PAGE 13.

SODIUM PHOSPHATE
TRI-SODIUM PHOSPHATE
PHOSPHORIC ACID, 75% H_3PO_4
AMMONIUM PHOSPHATE
PHOSPHORIC ACID PASTE
FEDERAL PHOSPHORUS CO.
BIRMINGHAM, ALABAMA

To remove objectionable color and odor from your product

USE

NUCHAR

THE PURE CARBON FOR PURE PRODUCTS

Its distinctive features are:

EXCEPTIONAL PURITY
GREAT CAPACITY FOR ABSORBING IMPURITIES
HIGH DECOLORIZING ACTIVITY
MARKED EFFICIENCY FOR IMPROVING ODOR AND FLAVOR
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MADE IN AMERICA BY AMERICANS

Packing: For Absorption, Condensing, Drying or Neutralizing Towers

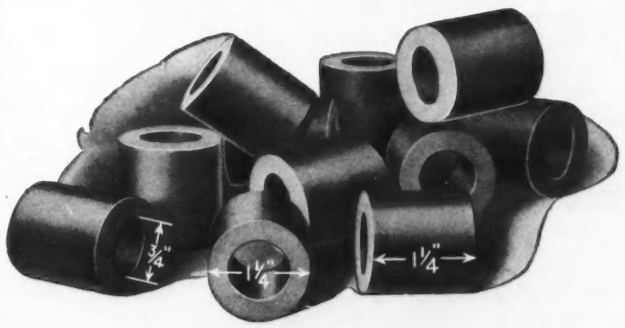

FIGURE 134
SMALL TUBE TOWER PACKING

Small Tube, or Ring, Tower Packing, No. 134

One size only shown on illustration—we make four standard sizes as listed below, and made either with a glazed, or an unglazed body as you prefer, in either case the rings being acid proof throughout the entire body. Also made in sizes to suit your needs.

⅝" long, ⅝" diameter, ⅜" hole.	All
¾" long, ¾" diameter, ⅜" hole.	Carried
1 " long, 1 " diameter, ⅝" hole.	in
1¼" long, 1¼" diameter, ¾" hole.	stock

Used as entire packing for small bore towers, or at top of large towers on large packing for more even distribution of the liquor over packing, etc. A good, reasonable priced, and efficient tower packing. Will stand considerable compression and the severe conditions encountered in chemical towers. Packed in barrels for L.C.L. shipment—or loose for carload shipments. Samples gladly furnished. State if wanted glazed or unglazed—quantity—size.

Acid Proof Chemical Stoneware Curved Partition Rings. Carried in Stock. Figure 132.

Are made in three standard sizes.

Sizes	6"x6"	6"x4"	4"x3"
Weight each, pounds	8	5½	2½
Number to a cubic foot	8	12	36
Minimum carload	6,250	10,000	20,000
Number to a barrel	30	46	100

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LEWIS LINSEED OIL

WE can supply you with the following special linseed oils under the Lewis brand:

Lewis "S. H." Oil adapted for the manufacture of special printing-ink varnishes, enameled leathers and linoleum.

Lewis "AAA Refined" Oil of the right character for making clear varnishes and white printing inks.

Lewis "SPC" Oil, cold pressed raw linseed oil, clear and light in color, used to give a durable high gloss for exterior painting.

Lewis "Heavy Bodied" and "Air Treated" Oils of high specific gravity used straight for making printing inks and plate oils. Also used in the manufacture of preparations having a linseed oil base.

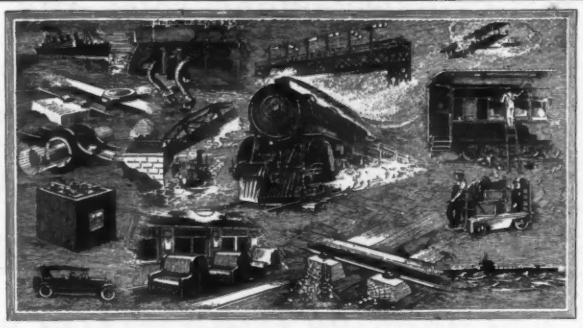
These oils are guaranteed of the highest quality.

Our raw, boiled and double-boiled linseed oils are pure, well-settled and carefully filtered.

We can fill your orders promptly from our ample stocks.

John T. Lewis & Bros. Co.

Philadelphia



Lead goes with you on every journey

It helps link together the peoples of the earth

TRAINS, trolleys, and trucks would halt if suddenly deprived of the lead they contain. Steamships would drift perilously on unknown seas. Airplanes and dirigibles would not rise.

The coal for your furnace, the food for your table, the clothing for your body, are brought to your door with the assistance of lead.

The products and treasures of distant countries are more easily transported because of lead.

When you travel by rail

You do not see lead on the railroad train or along the road, but your train can not go far before storage batteries, made mostly of lead, play an important part in assuring a safe and comfortable journey. These lead batteries operate drawbridges, set the signals that guard your safety, and furnish power for the electric lights that add to your comfort.

At terminal stations you may see trunks and express packages carried on platform trucks whose moving power is derived from storage batteries that are little else but lead.

Lead in other places

The bulb in the locomotive headlight and the electric light bulbs in day coaches and Pullman cars are made of fine lead glass. Railroads use lead expansion bolts, calking lead, or lead wool for anchoring rails securely to a concrete roadbed.

Lead is in the rubber air-hose through which passes the air that puts the brakes on all car wheels. Bearings, some of which contain lead, help to decrease friction which would otherwise snap the train. The safety torpedo that bangs like a shot to warn of danger ahead is held to the track by a lead clasp.

The most familiar use of lead

Another use of lead by railroads is as paint. Red-lead, an oxide of lead, makes a paint that protects iron and steel equipment against the attacks of rust.

White-lead, on the other hand, is the most valued paint for wood and other non-metallic surfaces. Paint is the best known of all the many uses of lead and its products.

People are realizing today what "Save the surface and you save all" means. And they are saving the surface by protecting it with paint containing a high percentage of white-lead. For the best paints have the greatest amount of white-lead.

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The professional painter uses lead-and-oil, or pure white-lead thinned to painting consistency with pure linseed oil. Such a mixture sticks to the surface and adds substantially to the life of a building.

Look for the Dutch Boy

NATIONAL LEAD COMPANY makes white-lead and sells it mixed with pure linseed oil, under the name and trade-mark of *Dutch Boy White-Lead*. The figure of the Dutch Boy you see here is reproduced on every keg of white-lead and is a guarantee of exceptional purity.

Dutch Boy products also include red-lead, linseed oil, flatting oil, babbitt metals, and solder.

Among other products manufactured by the National Lead Company are lead castings, sugar of lead, lead weights, calking lead, lead washers, mount plates, and planking blocks.

More about lead

If you use lead, or think you might use it in any form, write to us for specific information.

One of a series of advertisements appearing in national magazines. They tell readers of the important part which lead—and especially white-lead—plays in our daily life. Below we call attention to other National Lead Company products.

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The names of the producers and distributors listed below are those of advertisers in the Oil, Paint and Drug Reporter, and the announcements of these advertisers may be found by referring to the alphabetical index on page 95 of this issue. The general headings are those shown in our Prices Current which will be found on pages 3 to 8, inclusive.

SERVICE—If you are in the market to buy or sell any of the products quoted in the Prices Current or the Market Reports of the Oil, Paint and Drug Reporter, or are in need of any products not listed, or wish to buy machinery or equipment of any kind, we suggest you consult the advertisers listed below; they would appreciate your mention of the Reporter and so would we.

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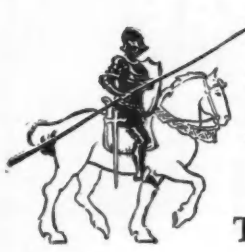

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Oil, Paint and Drug Reporter

The Market Authority Since 1871 in

Chemicals—Dyestuffs—Drugs—Paints—Oils—Fertilizers

VOLUME 104. No. 12 MONDAY, SEPTEMBER 17, 1923 100 William St., New York

Oil, Paint and Drug Reporter

Established 1871

Issued weekly; mailed every Saturday, under publication date of the following Monday. Published by the OIL, PAINT and DRUG REPORTER, Inc., at 100 William street, New York:—William O. Allison, President; Harry J. Schnell, Vice-President; D. G. Bogert, Secretary.

The following publications are incorporated in the OIL, PAINT AND DRUG REPORTER:—

DRUG, PAINT AND OIL TRADE
NEW YORK DRUG BULLETIN
NEW YORK DRUGGIST'S PRICE CURRENT
SOAP MAKER'S JOURNAL OIL AND PAINT REVIEW
WEEKLY DRUG NEWS

SUBSCRIPTION TERMS:—For the United States, $5.00; Canada, $7.00; other foreign countries, $10.00 per annum. Single copies, 15 cents each. All remittances should be made payable to the OIL, PAINT AND DRUG REPORTER, INC.

ADVERTISING RATES furnished upon application.

QUESTIONABLE OR UNDESIRABLE ADVERTISING WILL NOT BE ACCEPTED.

New Incentives in Chemistry

Since those early days when alchemists sought the philosopher's stone and delved into the mysteries with which they surrounded the metallurgical processes of nature, the art of the elements has held out prizes for many minds and many hands. In the later, and the latest, days of chemical science still have its rewards been considered well worth the seeking—and it has paid them widely and generously. Not only has chemistry rewarded those who have trained themselves and adapted their talents to the solution of its thousands of problems, but even richer have been the prizes which have been theirs who, situated industrially to benefit—and realizing it—have called to their aid the research of chemical workers. And the rewards yet to be gained will be none the less valuable than even the greatest heretofore known.

It is not, therefore, surprising that tangible prizes have been announced through the American Chemical Society by industrial interests to spur American chemists to still greater efforts to make their science of further benefit to manufacturing. Those who have established the worth-while prizes announced at Milwaukee last week realize that chemistry's opportunity to serve industry has not been lessened by the abundant aid already extended in a thousand directions. They know that the many contributions in that respect have but, in most instances, pointed the way to further development. They know the value of scientific training when coordinated with industrial undertakings.

Industry needs the practical sciences, and it needs today chemistry more than any other. This need must be understood in industry; for without understanding there can be no avoiding of the shortcomings of unscientific processes, which render any enterprise easy prey for more progressive competition. Much of the difficulty which has attended and still attends the attempts to establish a synthetic dyes industry in Great Britain has been attributed to a lack of understanding of the essentialness of adequate, freely functioning technical supervision.

What is true of dyes in Great Britain is equally true of leather, paper, paint, petroleum, flour, fatty products, soaps, almost every article of commerce in every land: the usefulness of chemistry under properly directed application is so nearly universal. Therefore will industry at large and the millions of those it serves, as well as the chemical industry, chemistry and the practitioners thereof, be the beneficiaries of these latest generous offers of tangible prizes for chemical research and appreciation. They are prizes for service to mankind; for they are incentives to endeavors toward the improvement of the condition of the peoples of the world, the advancement of civilization.

Business Passed the Summer Well

Seasonal easiness—the throb of industry, although diminished in tone, was too regular to justify designation of the condition as dullness—prevailed throughout August in the industrial and commercial fields served by the Oil, Paint and Drug Reporter. The monthly analytical charts for last month, consequently, picture a preponderance of declining values. For the most part, however, the levels were higher than those of the corresponding 1922 period. And those which were lower were due almost without exception to enormous gains in productive capacity; for consumption ran above the mark of last year.

Despite the necessity of avoiding accumulation of stocks of bleaching powder and the usual slackness in the leather and textile industries, the heavy chemical groups charted in the Reporter analysis of market trends presented encouraging evidence of steadiness during August. There were no price advances to be recorded, it is true, but the seasonal declines due to the aforementioned influences were insignificant, and all other products held to the July levels. In organic chemicals there was one quotation higher than that of a month earlier, that unique distinction (among all the charted groups) falling to aniline oil—the supply was inadequate to a flurry of demand. Benzol was unchanged. But marked reductions were to be recorded for those recently sky-high products, phenol and cresylic acids. The dizzy altitudes attained by quotations on these coal-tar derivatives a few months ago proved such a stimulus to increased effort in domestic production that supplies have become more than ample, with the natural result.

Paint manufacturers were somewhat benefited by the trend in August of the markets for their materials. Strengthening in the metal markets served to keep pigment prices at July levels, but advantages were offered in linseed oil, turpentine and dry colors. The first-named of this trio took quite a tumble as a consequence of bearish news about crops. Turpentine dropped a little further from the peak of four months ago—but it has since recovered the August loss and more, so that the dilatory buyer has cause to regret the passing of the dog-days opportunity.

Reductions in quotations on crude petroleum, somewhat sporadic, at that, lowered the trend line a trifle in August, but did not depress it to the August, 1922, level. The petroleum industry, insofar as crude oil is concerned, has shown an amazing capacity to absorb unprecedented production. It has been loaded with an accumulation of raw material, which would have wrecked almost any other industry. The gasoline side of the market did go to pot, but that is not to be wondered at; all logical reasoning would have to lead to the conclusion that existing conditions would smash the entire industrial edifice. In the endurance contest, the palm belongs to petroleum.

Not alone for what they depict with respect to last month, but more particularly for the comparable pictures they present of market trends over the past two midsummer seasons, the latest series of charts in the Reporter's analytical record afford an interesting study. They are printed in this issue, pages 44F to 45, inclusive. They will cheer up the man who has been ready to believe that recent months have been a period of trial too severe for business, and that the easiness of the markets was, in truth, a serious depression. Business has not been depressed; it does not face a depression. It has had its "siesta," and it awakes refreshed to new vigor.

Turn to the pages mentioned above. Compare the charted trends for this year and last. Line up your own business on this reliable gauge—its adaptability is complete. Get ready for a period of record-making activity.

Japanese Relief Fund

So ready had been the response of the trades in the Reporter's field to the call for aid for Japan, that the contributions of many firms and individuals had been made before the announcement in last week's issue reached them. For this reason we are printing lists of all contributions reported to us, the first list appearing on page 21 of this issue. Contributors are invited to inform us of their donations. Checks sent to the Oil, Paint and Drug Reporter should be made payable to the American Red Cross.

Avoid the Coal-Car Crowd

Business is coming out of the midsummer slump with all the manifestations of energy with which a young bee emerges from its waxy larval cell. The improvement in tone is quite general as to the leading lines of industry and commerce and promises to affect, not only those divisions wherein due preparation has been made for a fully expected recovery, but those as well which have held a pessimistic view of the duration of the slack period.

Of course, readiness will expedite the reaping of the benefits of business improvement; they cannot be expected to accrue in quiescence, as do those of a sun bath. Therefore is it well that business men, especially those engaged on the commercial side, begin to look ahead. Eventualities may turn out to be a cloud before the sun.

For one thing—and it is an important matter—assurance of adequate supplies should be looked to without delay. Transportation disruption is likely to be a serious handicap in that respect this fall. Car loadings are now some 15 per cent. (168,761 cars in the week ended September 1) greater than they were a year ago, and the peak of the rail transportation load usually comes in October. Anticipation of possible, yes, probable, delays of shipments is a timely policy.

The coal situation is going to lay an extraordinary load on the railroads of the country as soon as cold weather closes in. One of the big coal-carrying roads is now some five thousand cars a week behind its last year's record, although more than a million cars ahead for the first nine months of this year. This shows plainly that the early fall movement of coal has been curtailed by the mining controversy. The resulting shortage will have to be made up, no matter what means may have to be adopted to get out the coal.

He who gets his goods shipped now will

not be troubled by the crowding out of his supplies when the interim's accumulation of deferred coal shipments must be made up. The ancient adage about the wisdom and benefit of forewarnings is timely.

What Will Be the Verdict?

A judgment is in progress this week, the outcome of which will be of particular significance to the chemical industry and to the many industries to the progress of which chemical activity contributes a large and an essential part. The chemical exposition opening today in this city will prove or disprove its own usefulness to the chemical industry, and it will measure the extent to which the industry is equipped to "sell" itself to manufacturing and ultimate consumers of its products. The verdict will depend on the ability with which the exposition and the industry present their somewhat different, largely similar cases.

In preparing for this year's exposition, the management has made commendable efforts to interest the chemical industry in that purpose which sought better to establish the service of chemistry to industry in general. If the fulfillment of that purpose be not more closely approached—if not attained—than in preceding years, who shall say where lies the fault?

The exposition management offered this year an opportunity for the chemical industry to prove its essential economic value. There has been expression of opinion that this opportunity has not measured up to the possibilities which many believe to lie in that direction. The soundness of that opinion is to be judged by the experience of this year's exhibitors who have joined in the effort to make the exposition an inter-industrial liaison agency. The exhibitors who have caught the idea of adapting their displays to that purpose are the only ones who will be in a position to judge the fitness of the exposition.

The bigger question up for judgment this week is that of the preparedness, the ability, the willingness of the chemical industry to present a strong case for itself. This matter may seem to some to be beyond the question. But it is exactly such failure to realize the more or less developed opportunity which the exposition offers for the advertising, the "selling" of the chemical industry, that has been in part responsible for dissatisfaction in previous years. No advertising medium is better for the individual user than the use which he makes of the space he buys.

Judgment as to the extent to which the chemical industry is ready to make the most of the exposition opportunity will be a comparatively simple matter. The spectator, the really interested exposition visitor, will be the judge. He can see what success has attended the efforts to interest exhibitors from the chemical manufacturing field, and what results have been secured in the attempt to adapt the nature of the exhibits to their obvious purpose. The frequency with which chemical expositions shall henceforth be held is a matter of no moment, if the purpose of the exposition is not this year better exemplified than in the past.

Trade News Briefly Told

Francis Gundil, camphor importer, has returned from his hunting and fishing lodge in the Province of Quebec.

According to an official report from Uganda, 48,784 tons of cottonseed were marketed there for the season to August 1.

Mr. and Mrs. Francis P. Garvan are the parents of a daughter born September 11 at their home, Wheatley Hills, L. I.

A new sulphur well at Hoskins Mound, Texas, blew up September 8, gas from the well catching fire. The derrick was destroyed.

C. F. Graff, president and general manager of the American Nitrogen Products Co., Seattle, was a visitor in local trade circles last week.

John B. Swift, president of the Eagle-Picher Lead Co., Cincinnati, has returned from a combined business and pleasure trip in the East.

The R. F. Johnston Paint Co., Cincinnati, is making extensive alterations to its offices, which, when completed, will be twice as large as formerly.

George Kantor, pharmacist, 470 Convent avenue, this city, filed a voluntary petition in bankruptcy last week, giving his liabilities as $5,776 and assets nothing.

The Cincinnati and Dayton Paint Production Club will hold its first meeting of the fall season today at the Engineers' Club, Dayton. Plans for the coming season will be formulated.

L. C. Green, assistant manager of the New York branch of the Columbia Naval Stores Co., returned last Wednesday from a business trip in the South.

The Harvard Graduate School of Business Administration is giving this year for the first time a course on Latin-American markets and trade. The course of lectures is open to the public without charge.

E. R. Smead, president of the E. R. Smead Co., oils and paint materials, Cleveland, who arrived in this city several weeks ago on a business trip, returned to the West last Tuesday.

At the annual meeting of the Vanadium Corp., last week, F. W. Allen, Samuel Pryor, W. E. Corney, Payne Whitney and A. A. Corey were added to the board of directors. The new directors replace C. M. MacNeill, deceased; Joseph Dewyckoff, E. R. Tinker, C. M. Walton, jr., and E. F. Nickerson.

D. B. Osborne, Sr., has been made representative of the Stratford Chemical Co., Morganville, N. J., with headquarters in Atlanta, to handle insecticides. It was through Mr. Osborne that the State of Georgia bought a large part of the calcium arsenate that was distributed by the Bureau of Entomology this year.

The Postoffice Department has announced that henceforth all shippers of parcel post packages to Guatemala must present four copies of an invoice to the nearest Guatemalan consul who retains three after completing his vise. The other copy goes to the addressee. Two per cent. of the value and a minimum of 50c. is charged for the vise

The Potash Importing Co. of America, which has charge of the distribution of German potash in this country, has issued Number 1, Volume 1, of a house organ that it calls "Better Crops." It is a most attractively gotten up little magazine, and has a great deal in it that does not simply boom German potash. It will be issued each month.

Fire of unknown origin occurred August 29 on the sixth floor of the United Drug Co. Building, St. Louis. Damage was estimated at $5,000.

John Borg, president of the Callahan Zinc-Lead Co., has returned to this city from a trip of several months in the West. While away, Mr. Borg visited and inspected six mining properties.

W. P. Fuller, Jr., of W. P. Fuller & Co., San Francisco, has been appointed representative of the paint industry on the general committee in charge of the raising of San Francisco's quota of the Japanese relief fund.

The North Carolina Clay Mining Co., Inc., is the new designation of the Titantic Ore Co. The capitalization of the company has recently been increased and it is now one of the largest factors in the North Carolina kaolin industry.

Harold B. Fobes, treasurer and sales manager of the Burgess, Fobes Co., paint and varnish manufacturers, Portland, Me., has withdrawn from the company. Leon M. Fobes remains president and Theodore B. Fobes has been elected treasurer.

Harold King, in charge of the New York office of McLaughlin, Gormly & King, crude drug merchants, Minneapolis, and Miss Effie Adams, will be married September 25. The wedding will take place at Superior, Wis., the home of the bride.

Invitations have been sent to 125 newspapers and 300 department stores stores to attend the exhibit of the laundering of goods dyed with American dyes at the chemical exposition this week. The invitations bear the slogan "American Dyes are Fast."

Francis A. Meade, manager of the Japanese factory of the New York Brush Co., is reported safe after the earthquake. His wife and little son also are safe. Mr. Meade went to Japan from Brooklyine, Mass., and Mrs. Meade's home was in Marlboro, Mass.

Glass bottles and demijohns have been exempted from export duty by Mexico, according to a report to the Department of Commerce from Assistant Trade Commissioner H. Bentley MacKenzie, Mexico City. There was formerly a duty of .01 peso per gross kilograms.

Charles A. Gorman, Boston, the New England representative of the Ault & Wiborg Co., printing inks, has returned from an automobile tour with his family in the Middle States. The longest stop of the trip was made at Cincinnati, where he visited the company's headquarters and factories.

The Wooster Brush Co, Wooster, Ohio, has just moved into a new addition to its plant, which was constructed primarily for general offices. Space formerly occupied by offices will be used for manufacturing purposes and will increase the production capacity of certain departments over fifty per cent.

Harry Kingsborough, Cleveland manager of the Krebs Pigment and Chemical Co., Newport, Delaware, sailed September 15 for the Mediterranean accompanying Henry J. Krebs, chairman of the board of directors of the above company, for a three months' tour of Europe.

The organization of the Scott Drug Co., Charlotte, N. C., which succeeds the wholesale drug house of Jno. M. Scott & Co. has been completed with offices as follows:—Chairman of the board, Jno. M. Scott; president, Walter Scott; vice-president, Z. M. Moore; secretary-treasurer, E. M. Hannon.

Louis M. Rhodes, director in charge of bristle purchases of the Wooster Brush Co., Wooster, O., narrowly missed being in Yokohoma at the time of the recent disaster. Mr. Rhodes, accompanied by Mrs. Rhodes, was due to arrive at Yokohoma the day after the earthquake. The ship was not heard from for some days but finally word was received of its safe arrival at Shanghai.

The Department of Commerce has announced the appointment of Jesse Frederick Van Wickel of Brooklyn as trade commissioner to the Dutch East Indies and British Malaya, with headquarters at Batavia, Java. Mr. Van Wickel brings to his new position a knowledge of import and export problems acquired by many years practical experience. He has held responsible positions with the American Trading Co., Pacific Commercial Co. and Cuban Cane Sugar Corpn.

The Interstate Cottonseed Crushers' Association has appointed Dr. Thomas C. Law, chemist, Atlanta, to carry on promotion work in the sale of cottonseed meal. Dr. Law will visit dairy centers of the North and West and interview dairymen, college of agriculture officials and feed interests to create a larger interest in cottonseed meal as a source of protein that is both highly nutritious and cheap. Some of the States are showing a reduction in their demand for cottonseed meal.

The D. H. Litter Co., this city, has on exhibition in booth 259 at the Chemical Exposition samples of the products of the Drackett Chemical Co., Cincinnati; Ajax Chemical Co, San Francisco; Metro-Nite Co., Milwaukee; Ohio Pail Co., Middlefield, Ohio; American Container Co., Philadelphia; Edward Trainer, Philadelphia, and the Import Mineral Products Co., Vermega, Cuba. A showing is made of the chemicals, pigments, colors and other merchandise made by these concerns for which the D. H. Litter Co. is agent.

For Other News Briefs See Index

Paint Clubs Plan Special Train for Chicago Meeting

The railroads belonging to the different passenger associations in the United States and Canada have granted special fare and one-half round trip tickets to the national conventions to be held at the Drake Hotel, Chicago, October 15 to 20. These will be sold by local ticket agents upon presentation of identification certificates.

One identification certificate will suffice for each representative, including dependent members of his family. These may be obtained through the secretaries of local paint clubs or from W. T. Sheffield, chairman of the convention transportation committee, 208 South La Salle street, Chicago. Mr. Sheffield will also furnish information on any particulars of arrangements for transportation to the convention.

Arrangements have been made by Carl H. Black, chairman of the transportation committee of the Paint, Oil and Varnish Club of New York, for a special section of the Pennsylvania Limited which will carry members to Chicago. The train leaves this city at 11:05 a. m., October 13, arriving at Chicago the next morning at 9 o'clock. Mr. Black is trying to make arrangements with clubs in Boston, Philadelphia and Pittsburgh for their combining with the New York delegation.

Obituaries

Fred E. Signer

Fred E. Signer, general sales manager of the Butterworth-Judson Corpn., died September 9 at his home, Bronxville, N. Y., after an illness of a week. He was fifty-four years old.

Mr. Signer was born in May, 1869, at Buffalo and after leaving school entered the employ of the Buffalo, New York & Philadelphia Railroad Co. as a clerk. He received steady promotions and held positions in the passenger and freight agent's departments of several railroads until in 1914 he was appointed general eastern freight agent of the Lehigh Valley Railroad, with offices in this city. Mr. Signer remained in this position until in January, 1920, he became general sales manager for the Butterworth-Judson Corpn.

Mr. Signer was a member of the board of governors of the Traffic Club of New York, of which organization he was president in 1920. He was a former president and at the time of his death on the executive committee of the Salesmen's Association of the American Chemical Industry. He was vice-president and chairman of the board of governors of the Synthetic Organic Chemical Manufacturers' Association, a member of the Drug and Chemical Club and of the Ardsley Club, Ardsley-on-the-Hudson.

A wife, Lyle W., two daughters, Marjorie and Dorothy, and a brother, Charles B. Signer, of Chicago, survive.

J. Amory Haskell

J. Amory Haskell, vice-president of E. I. du Pont de Nemours & Co. and the General Motors Corpn., died September 9 at his country home, Red Bank, N. J. He was sixty-two years old.

Mr. Haskell started his business career in 1879 with the firm of A. & L. Nelson, this city. In 1883 he entered the employ of the Rochester & Pittsburgh Coal & Iron Company, advancing to general manager and treasurer. In 1892 he was made president of the Repauna Chemical Co., Wilmington, holding the post for thirty years, during nearly this entire period serving as president of the Laflin & Rand Powder Co.

One of the leading figures in General Motors, he, for a time, was president of two of its subsidiaries, the General Motors Export Co., and the General Motors Acceptance Corpn., but he resigned the former office in order to devote himself to the affairs of the parent company.

A widow, Mrs. Margaret Moore Riker Haskell; a son, Amory Lawrence Haskell, and two daughters, Mrs. Howland B. Jones and Mrs. Henry M. Post, survive.

John R. Campbell

John Russell Campbell, one of the makers of oil history, and one of the most prominent residents of Oil City, Pa., died at his home there recently. He was ninety-two years old and was known throughout the business world as a financier. He had made his home in Oil City since 1865 and was treasurer of the National Transit Co., publisher of the Oil City Register, and a director of the Oil City Trust Co.

Mrs. Lillian L. Liddell died September 7 in Malden, Mass., at the home of her brother, Charles L. Hamilton, president of the Potter Drug & Chemical Co. She had lived with her brother since the death of her husband, Frank E. Liddell, some years ago. Her father, George F. Hamilton, and another brother, George M. Hamilton, also survive.

Benjamin Newman, a brush jobber, who was Western representative of J. C. Pushee & Sons, Boston, died September 6, at his home in St. Louis. He had been in poor health for the past six months.

Mrs. Frances Leeds Noyes Taintor, widow of Henry F. Taintor of the H. F. Taintor Manufacturing Co., this city, died September 2. A son, Starr Taintor, president of the company, survives.

William A. Jurgens, fifty years old, a foreman for the American Can Co., died September 10 at his home in Brooklyn.

W. J. Oliver, forty-nine years of age, an oil operator of Glasgow, Ky., was found dead at the Willard Hotel, Louisville, on the evening of September 4, death being due to heart trouble. J. B. Mayes, a Louisville man who had an engagement with him that evening, found Mr. Oliver lifeless. The remains were taken to Glasgow for interment. A wife, two daughters and a son survive.

T. P. Norris, salesman for Finlay, Dicks & Co., wholesale druggists, New Orleans, died suddenly in a drug store in that city September 6. He was in his forty-fifth year and was a resident of Meridian, Miss.

M. Elwell Strait, an employe of the Standard Oil Co. of California, in San Diego, was drowned September 4 when he went to the rescue of two companions who had been carried beyond their depth while swimming.

Sodium Nitrite Manufacturer Presents Arguments for Increase in Tariff Rate

Seattle Company Official Is Sole Witness for Petitioners—Commission Adjourns for Final Hearing September 26

WASHINGTON, Sept. 10, 1923.

The United States Tariff Commission today held a hearing in its investigation of sodium nitrite under the flexible provisions of the tariff act. The hearing developed clashes between members of the commission and between the sole witness, C. F. Graff, president and general manager of the American Nitrogen Products Co., Seattle, the applicant for an increase of 50 per cent. in the rate of duty from 3 cents to 4½ cents per pound, and Judge Marion DeVries, who appeared as counsel for the Norwegian Nitrogen Products Co., New York, in opposition to the increase.

Much of the information requested of Mr. Graff he declined to give publicly on the ground that it was confidential. He stated, however, that he would tell what he could privately to the commission for its information.

Differences developed between Vice-Chairman Culbertson and other members of the commission as to the propriety of bringing in a telegram received from alleged stockholders of the American Nitrogen Products Co. Mr. Culbertson started to use the telegram as the basis of questions to witness, but he was headed off by Commissioner Glassie, who suggested the telegram was not before the commission as evidence. Chairman Marvin ruled that reference to the telegram was out of order pending its consideration by the commission in executive session. The hearing thereupon adjourned for half an hour while the commission met, after which it was announced that the telegram was not deemed to be competent evidence.

Mr. Culbertson asked about the physical value of the Seattle concern's plant, but this was refused by Mr. Graff, who, however, declared that his concern has an efficient plant representing substantial investment and production. Mr. Culbertson brought out that the company had $1,229,500 stock outstanding in 1920, but witness declared that statement was confidential.

Officials of the commission recalled that a representative of the American Nitrogen Products Co., at the Congressional hearings, advocated a duty on sodium nitrite, but said he did not want it to apply to that product coming from Canada, as his company had a plant in British Columbia. It developed today that the Canadian plant was sold some time ago to creditors of the American company and is said to be in process of being scrapped.

Consumption Estimated

The national consumption of sodium nitrite was stated by Mr. Graff to be between 3,000 and 5,000 tons per annum, mostly in the dye industry, where he declared it is absolutely essential. His company, he said, represents production exceeding 50 per cent. of the demand, and other domestic concerns produce sufficient to make up the balance.

Norwegian companies, he said, when they cannot sell their nitrite as such, merely transform it to nitrate by adding nitric acid, and sell this nitrate for fertilizer purposes. American companies will do the same thing some day, but they are not prepared to do so now, he said. The market is not good, he declared, and his concern has not made money.

The pre-war price of sodium nitrite was 6 cents per pound, the commission was told. It went to 60 cents during the war period, but is now not much above the pre-war figures. If prices are lowered, Mr. Graff said, consumers would be given the benefit.

Answering questions by Commissioner Glassie, Mr. Graff said that the Canadian plant of his company made sodium nitrite for a year and a half and that his company had had contracts to supply nitrite to New England dye manufacturers. The American plant was closed from 1921 to 1923. Costs are lower now than they were for a time.

There are two or three other American manufacturers of sodium nitrite. The general price is 7¼ to 7½ cents a pound, witness said. Importations are brought in either by agents of the Badische Co. or by the Norwegian or Swiss companies. The duPont company invited the American company to make quotations, but the duPont company said an importer quoted much lower prices, below the American cost of production. The underbidding was less than 1½ cents per pound, but this was because the American company quoted an abnormally low price.

In response to a question from Commissioner Glassie, it developed that the Norwegian Nitrogen Products Co. is purchaser and probably exclusive selling agent of the products of the Norse Nitrite Co., Norway.

About the Arc Process

Under the arc process which his company uses, Mr. Graff said there is a tendency that sodium nitrite will become a by-product. Other processes used in America are the lead process and ammonia process, witness said. About the same capital is required in America to build a nitrate plant similar to those in Norway, but the power itself in Norway is much cheaper, witness said. He added that no further extension of the nitrite industry is likely in Norway. The ammonia and cyanamide processes have been tried in this country, witness said. He said the arc process for certain nitrogen products, especially nitric acid, is the cheapest if cheap power is available.

Replying to questions by Vice-chairman Culbertson of the commission, Mr. Graff expressed the opinion that nitrogen products for fertilizer purposes can be produced as cheaply as the Chilean natural nitrate can. The artificial nitrogen products he estimated as constituting "several per cent." of the total consumed, but he did not consider that percentage negligible because Chilean exports total two to three million tons per year. The artificial products are perhaps 10 to 15 per cent. of the total, and their proportion is growing all the time. The Chilean product can be sold at a much lower price than it is now, Mr. Culbertson brought out, as the export tax is about 56 per cent. of the total cost, he said. Mr. Graff, however, stated he did not fear the competition with his process and under his conditions.

Chairman Marvin of the commission suggested that as the price of the Chilean product might be lowered as a result of competition it would be possible for American producers to petition for higher duties under the flexible tariff. He was reminded, however, that there is no duty on sodium nitrate, but witness declared that when synthetic nitrates are produced in this country, if competition from Chile is too heavy, the producers can go to Congress and seek protective duty if necessary.

Dumping Charged

Importers apparently are undervaluing sodium nitrite for the purpose of controlling the American market, according to Mr. Graff, as they are selling it here cheaper than in other countries. In response to complaints of this character, he said the customs division of the Treasury Department issued an order in August directing that all appraisement entries be held up pending a treasury investigation under the anti-dumping law, and he read the customs division's letter to him to that effect.

Judge Devries denied this on behalf of the Norwegian selling agents, declaring that they were importing it every week. He intimated that the treasury investigation had been completed and that it had been discovered that there was no dumping, and that therefore the order had been revoked. Mr. Graff emphatically stated that such was not the status of the situation September 8 when he had a talk with officials.

The witness concluded his direct testimony with a general statement declaring that the domestic nitrogen industries needed and deserved all the protection possible, because they are most important to the country as a whole. Getting back to the case in hand, he stated that sodium nitrite manufactured by his company had been proved of equal quality to the foreign product. Discussing costs of production, he said that sodium nitrite is a by-product in the Norwegian process, being made from the end gas in the last tower, which otherwise would simply be let out into the air as waste. Nitrite is a main product in the process used by the American Nitrogen Products Co., he said.

Cross questioned by Judge Devries, Graff refused to tell the cost of labor, power and other elements that go to make up the cost of production at the La Grande plant of his company, but did say that the investment in the plant was approximately $200,000. He brought this out in refutation of the inference by Judge Devries that his company was basing costs of production on an inflated valuation. He said that all these details and figures were in the confidential data submitted to the commission. The commission apparently upheld the witness on this point, though there was considerable argument and discussion.

The American Nitrogen Products Co. has made no sales this month, and but few last month, Mr. Graff stated in reply to questioning by Judge Devries. These sales were at prices ranging from 7¼ cents to 7½ cents, while some sales had been made recently at forced quotations lower.

Atlanta Paint Club Elects Delegates to Chicago Session

ATLANTA, Sept. 12, 1923.

The Atlanta Paint, Oil and Varnish Club has elected the following delegates and alternates to the National Paint, Oil and Varnish Association convention in Chicago:—A. S. Roher, A. P. Tripod, Fred Coolidge, delegates; George W. West, A. A. LaVaque and L. R. Hunter, alternates.

Several other members of the club are planning to make the trip and the club will endeavor to have the Southeast well represented. The club secretary, F. D. Hills, has been instructed to get in touch with various paint clubs in the Southeast with the end in view of having the various paint men of this section who intend to make the trip gather in Atlanta and travel in a body.

Boston Paint Golfers Play Chestnut Hill Club Course

BOSTON, Sept. 13, 1923.

The eleventh meeting of the Boston Paint & Oil Golf Club was held yesterday at the Chestnut Hill Golf Club. Twelve cards were turned in, as follows:—F. W. Atwood, 98-98; J. F. Davenport, 106-102; A. H. Decatur, 111-83; F. M. Eisenman, 98-98; C. E. Gale, 100-100; H. M. Gordon, 97-87; H. A. Hall, 76-76; G. H. Kimball, 97-97; C. H. Lawrence, 99-92; J. B. Lord, 106-86; W. G. Soule, 97-90; H. A. Robbins, 107-97.

First prize was won by H. A. Hall, and second prize by A. H. Decatur. The result of the match play for the championship cup was as follows:—Eisenman beat Gale, Kimball beat Davenport, Gordon beat Lawrence, Hall beat Robbins.

Miss G. Rutherford, of the staff of Wing & Evans, Inc., this city, is now on her vacation.

France to Get Third Share in German Chemical Industries as Payment Pledge

Stresemann Offer for Reparations Settlements Strikes Various Economists Differently —Nature of Seized Dyes

WASHINGTON, Sept. 13, 1923.

The Ruhr contest is lost, Chancellor Stresemann admits, and it is confirmed at the German Embassy here that the German authorities have offered to give France one-third of the stocks (securities) of all German chemical and other industries as a pledge for the payment of reparations. Thus the German Government endorses the principle of propositions that have been privately suggested from both sides of the Ruhr controversy that a share in German industry be turned over to the French. Indications are that Germany will send ambassadors again to France and Belgium, thus resuming direct diplomatic relations and opening the way for direct negotiations.

The value of the pledge now suggested by Stresemann is a subject of disagreement among economists and others. According to the German Embassy, its offer marks a great step toward a settlement of the reparations question; that it goes way beyond anything heretofore offered and that the pledge is worth a vast sum of money. It is estimated at the Embassy that before the war the total value of stocks issued by all German industries was 30,000,000,000 gold marks which, at the present rate of exchange, would be worth 2,600,000,000 marks. One-third of this latter figure would be between 80,000,000 and 900,000,000 marks.

The German plan is understood by German spokesmen here to be to give France annually one-third of the profit of all German industries as reparations. Last year, it is said, Germany turned over about one-third of the profits of German industries to the Reparations Commission. In the years before the war the profits on German industrial stocks averaged 5 or 6 per cent., according to the Embassy, and now on the money actually invested in German industries the profits are said to be 1 per cent. or less, on the average, on a pre-war valuation of 30,000,000,000 gold marks. One per cent. would be equal to 300,000,000 marks, of which the French would get a third, or 10,000,000 marks, under the Stresemann plan. It is asserted by Germans that the French could raise a large loan by way of mortgage on the industrial stocks that would be turned over to them if the Stresemann offer were accepted.

It is believed at the Embassy that French industrialists would be inclined to accept the Stresemann offer, which is along the line of suggestions originating with them, but it is predicted that the French politicians will not permit the French Government to accept the proposition. It is asserted that the French policy is rather to delay settlement of the Ruhr and reparations controversies while awaiting a breaking up of Germany owing to economic conditions and political factional differences in that country.

Value of Stocks Doubted

Economists and experts in the government service here do not see a very great value in the German industrial stocks offered to France. It is pointed out by these men that these stocks would simply be an additional title of the French to the payment of reparations; not actual payment. True, Germans say the dividends from these stocks would be paid to the French. But at present German dividends are in paper marks which have little value and it would always be possible for German industries to be so conducted that there would be no dividends on their stocks. That is said to be what is happening in the coal mines of the Saarre Basin, which have been turned over to the French.

However, at the German Embassy it is declared that the Stresemann offer of one-third of the German industrial stocks is made with the idea that the industries would be conducted in good faith with a view of yielding profits, and that the German workers would not be unwilling to work for concerns only one-third controlled by the French.

According to American economists' views expressed here, German industrial stocks would be simply so much more paper to be filed away with the Versailles treaty and the A, B and C reparation bonds issued by the German Government and turned over to the Allies. These bonds were for 132,000,000,000 gold marks. The treaty gave the Allies a mortgage on all the property of the German State and pledged the German Government to pay reparations in full, the amount to be determined later. The German Government has the power to tax German industries and private property for payment of reparations, and it is declared that to that extent German industries and private property were pledged for reparation purposes. The question is now asked whether, if the Stresemann offer were accepted and the French got one-third of all German industrial stocks, it would not be possible for patriotic Germans to knife those industries and for their products to be boycotted and for other industries to be established to which Germans would give their patronage, so that there would be no profits in the old industries.

In other words, German industrial stocks are regarded by government experts here as a delusion, as reparations. The only form in which reparations can be paid, it is declared, is in gold or goods shipped out of Germany. She has not got the gold, admittedly. And the Allied countries apparently do not want German goods for the most part, it is said, on account of them competing with their own products and industries either in their home markets or in the export markets of the world. Thus the reparation problem seems to many impossible of solution.

From the standpoint of control of German industries, stocks in such industries might be considered worth while by the French, it is suggested, because they might enable the French to have a say in the direction and development of German industries, the markets they should cultivate and the goods they should turn out, thus guarding French industries from undue competition. But French control over German industries could not be attained by accepting 33 per cent. of their stocks, it is pointed out. French industrialists have been reported as wanting 60 or 65 per cent. of German industrial stocks. In reports, from various sources over a long period the share in German industry suggested to be transferred to the French has ranged from 15 per cent. to 75 or 85 per cent. Apparently each side wants to control German industry.

Chemical Merger Talk Persists

Reports of possible merger of French and German chemical interests on various bases have been particularly persistent and there have been several arrows pointing in that direction, one is in connection with the Compagnie National (French dye concern) in which there are understood to be German interests. It has been rumored that under an agreement that concern would have the use of German patents and technical advisers and in return would agree not to sell its products outside of certain territory or within certain other territory. Another arrow was the French deal with the Badische Co. for construction of a nitrate plant in France. A third sign of the times has been seen in persistent rumors of a Franco-German potash combine.

The State and Commerce Departments are naturally much interested in the possibility of a Franco-German settlement along industrial or other lines, and it is understood that U. S. Chemical Trade Commissioner F. E. Breithut, at Paris, has been asked to send here information about any Franco-German industrial deals or proposed deals, whether private or governmental. There is still talk of American capital entering the German dye industry.

Getting back to the proposition to turn over German industrial stocks to France, and the understanding at the German embassy that if the proposition were accepted the profits of a third of German industry would be turned over annually to France, economists raise another point, namely, that it is not practicable to derive large profits from an industry for very long. It is pointed out that unless a large share of the profits of a business is put back into the business to keep it up, improve and enlarge the plant, and so on, it does not take long for that business to go to "pot." Many examples of this character have been seen in the United States where certain railroads or industries have been milked for a few years and have not made money for many years thereafter. So that even if German industry yielded profit of the withdrawal of too large a proportion of it would be disastrous, and the payment of reparations out of the profit or out of a small profit would be a long drawn out process.

Breithut Reports on Seized Dyes

A letter dated August 22, received from F. E. Breithut, American Trade Commissioner, located at Paris, states that the original reports of the amounts of dyes seized were somewhat too large. Information received from several sources indicate that the net weight of these dyes is 5,400 tons. Of this quantity Belgium and France require 2,300 tons immediately for their domestic needs. The remaining 3,100 tons will be sold in the markets of the world.

The seized dyes include indigo in the following forms:—

	Tons.
Indigo, 20 per cent	632
Indigo, 100 per cent	119
Indigo grains	55
Indigo reduced, about	250

The remainder, approximately 1,950 tons, contains 350 tons of alizarine red, leaving an unidentified balance of 1,600 tons.

The French and Belgians are still negotiating as to what share each will receive, and it appears likely at present that each will receive about 50 per cent.

In connection with the above it may be interesting to note that the Reparations Commission sells about 2,500 tons of dyes per quarter, so that the net amount which is now offered for sale should not disturb the American market very markedly, says the chemical division of the Department of Commerce.

From other sources it is reported that many of the dyes seized by the French were inferior in grade.

Cuban Port Bill Called Violation of U.S. Rights

The substance of the so-called Tarafa port bill recently introduced in the Cuban Congress has been made public by Sullivan & Cromwell, attorneys, this city, who has obtained an analysis of the measure from Havana business men.

The proposed legislation is declared unconstitutional in the report because of its nullification of the rights of individual initiative in the development of Cuban ports and the subordination of the executive power of the Cuban President to the will of the Consolidated Railroads Co. The report opines in part:—

Should the bill in question become a law no person or entity could hereafter, not even the State, construct in the port of Havana such works as piers, docks, warehouses—which would facilitate and lessen the cost of commerce—without first consulting the railroad companies.

Roland W. Inglis has joined the sales staff of the Wishnick-Tumpeer Chemical Co., Chicago.

New York Paint, Oil and Varnish Club Is Told Manufacturer's Place in Affairs

Speaker Urges That Horizon Be Broadened as To Public Duties—Convention Resolutions Discussed

The Paint, Oil and Varnish Club of New York held its first dinner of the season at the Biltmore Thursday evening. It was—it might be mentioned just to keep the record straight—the 186th dinner given by the organization, and was all that an affair of this sort should be:—A good dinner, important club business promptly transacted, an interesting address by a man who could talk well and a good vaudeville entertainment. There was a large attendance, the banquet hall being crowded and the evening was such an enjoyable one that everyone stayed until the end.

President Herman D. Ruhm officiated. As the first order of business following the dinner he called for a report from the Membership Committee, which was presented by Joseph A. McNulty. Four new members were proposed by the committee and the secretary was instructed to cast one ballot to elect all of them. The new members admitted were:—Paul O. Abbe, Inc., paint grinding machinery, New York, represented by Paul O. Abbe; American Can Co., third membership, Dudley Figgis, representative; Star Brush Co., Brooklyn, represented by B. K. Throckmorton, and Henry Sundheimer, Inc., chemicals, New York, represented by Henry Sunheimer. President Ruhm presented Dudley Figgis, who told his brother members how glad he was to be one of them.

Resolutions Considered

Frank Waldo presented the following resolution from the Executive Committee:—

Change in Constitution

Whereas, It is the desire of the members of the Paint, Oil and Varnish Club of New York, in behalf of their own club and in behalf of their membership in the National Paint, Oil and Varnish Association, to avoid the possibility of any activities in violation of any state or federal law, and particularly to prevent any effort to affect, restrict or control price competition; be it

Resolved, That the following amendment to article 1, of the constitution of the Paint, Oil and Varnish Club of New York be adopted:—"The club shall not be used, directly or indirectly, as a means of restricting free and lawful competition."

As the resolution proposed an amendment to the constitution of the club, it had to lay over until the next meeting.

Frank P. Cheesman offered the following resolution to be presented by the New York club at the national convention:—

Association Finances

In view of the growing importance of the association activities of our industry and the number of interests requiring financial support, and the increasing amount of monies needed to carry on these activities, it is the opinion of the Paint, Oil and Varnish Club of New Yoork that the greatest efficiency in our various activities and maximum present and future strength to our industry would result from organizing our finances on a strict business basis, budgeting all operating and business promotion and arranging for collection of the necessary sums at one time, under the concerted action of our entire industry.

Realizing that the successful operation of this plan will present many perplexing problems, and will require much analysis of our activities and their needs, and will demand careful study to provide for the funds, the Paint, Oil and Varnish Club of New York believes that the work of such analysis, organizing and budgeting should be undertaken at the earliest possible moment; therefore, be it

Resolved, That the Paint, Oil and Varnish Club of New York, in regular meeting assembled, go on record as favoring and adopting the principle of budgeting and financing as a group and at one time each year, all our association business, trade development and business promotion activities; and, be it further

Resolved, That a copy of this preamble and of these resolutions be presented to the forthcoming convention of the National Paint, Oil and Varnish Association with definite action requested along the followirg lines:—

() Acceptance by the National Paint, Oil and Varnish Association of the principle of this resolution.

(b) Appointment by the president of a committee of five members to be known as "The Budget and Finance Committee of the National Paint, Oil and Varnish Association."

(c) That the duties of the above committee shall be to study, analyze and budget, as far as our interests are concerned, the organization work, trade development and business promotion activities of our industry, for which financial support is requested from the members of the National Paint, Oil and Varnish Association, and the committee also shall work out an equitable procedure through which the necessary finances may be raised.

(d) That on adoption by the National Paint, Oil and Varnish Association, a copy of these proceedings and resolutions shall be sent to the presidents of the other associations in our industry for such action as to them seems best, with the further statement from the National Paint, Oil and Varnish Association that, if within the scope of their activities and agreeable to their members, the National Paint, Oil and Varnish Association would suggest to each the appointment of a "Budget and Finance Committee," to have duties and powers and instructions, the same as those conferred on the National Paint, Oil and Varnish Association "Finance and Budget Committee," and that the several committees study the problem together and submit a joint report and recommendation to their respective associations.

Mr. Cheesman also presented a resolution calling on the national association to revise its constitution along the lines suggested above for the local association, and request affiliated clubs to do likewise.

Henry G. Sidford, a member of the Executive Committee, spoke briefly in support of the resolution for a finance and budget committee. He told how successful the budget idea had proved in the Oranges where it had been adopted for the raising and distributing of money for charitable purposes.

About Trade Practices

There was no opposition to this resolution, but some of the members could not understand why it was necessary to change the constitution so as to forbid what never had been and never would be done. Several members demanded to know what the idea was, and why it was necessary to affirm that they were honest men in this manner.

The chair called on George V. Horgan, secretary of the national association, to explain the matter, and Mr. Horgan said that the resolution has been prepared at the suggestion of the council of the National Paint, Oil and Varnish Association. He said that in the moves to prevent violations of the Sherman act the activity of trade organizations was sometimes the subject of investigation, and that members of the Paint Manufacturers' Association had been once called before a grand jury in Philadelphia to give evidence concerning their organization. While the paint industry had been given a clean bill of health, and while everyone knew that neither the national nor local paint clubs had anything to do with price fixing, it had been thought wise to take such action as was proposed.

The chair was not able to decide whether the "ayes" or the "nays" had it when it came to a vote on the resolutions, and called for a rising vote. Many of those present did not vote, however, and the chair announced the resolutions adopted by a vote of 31 to 18.

After the adoption of the resolution W. R. Morpeth was recognized to present a resolution thanking the National Lead Co. for the use of its boat Atlantic for the club picnic last spring. This motion was carried with enthusiasm.

President Ruhm announced that he was going to ask each of the standing committees to prepare a report covering the entire year of 1923, these reports to be presented at the January meeting and published by the club. He said that he was confident that these reports would be of such interest that they would furnish the ideas for a very interesting discussion at the March meeting.

H. H. Litter, chairman of the special committee on uniform contracts, said that his committee was to hold a meeting soon and would have something to report at the next meeting of the club. He told of the preliminary work already done and of the effort to be made to obtain the ideas of all members.

Carl Black, of the special committee on transportation for the Chicago convention, told the members that within a few days they would receive a circular from the committee giving full information as to all the arrangements made.

Harvey Edwards, Chicago, chairman of the reception committee for the thirty-sixth annual convention of the National Paint, Oil and Varnish Association, was introduced by President Ruhm and given an ovation. Mr. Edwards spoke of the importance of the national organization. He said that he sometimes feared that the members of the paint industry did not sufficiently appreciate the importance of their national organization. They were somewhat inclined to take things for granted and not to realize thoroughly the great work that is being done by the national organization and of the time and labor given to this work by busy men.

He told how fortunate the organization had been in the charactter of men it had been able to draft into service as presidents of the national body, and of their unselfish labors for the entire industry. He did not forget to pay a compliment to the national secretary. He also spoke briefly of the plans for entertainment at the coming national gathering, and before he had finished everyone knew that he was going to miss a great deal if he failed to go to Chicago.

Manufacturers in Public Affairs

The speaker of the evening was John E. Edgerton, President of the National Association of Manufacturers. President Ruhm introduced Mr. Edgerton as an old friend, and it did not take the members present long to discover that Mr. Ruhm's old friend was a public speaker such as one seldom has a chance to listen to. Mr. Edgerton's address was an appeal to manufacturers to take their proper place in national affairs, to rise above the level of a life devoted solely to business and to recognize their duty as citizens of this republic.

Mr. Edgerton said that since he had been president of the National Association of Manufacturers, the general practicioner among the manufacturers' organizations, he had had a great chance to study men, and had learned more in a couple of years than in all the previous period of his life. He said that he had been a manufacturer over twelve years, having previously conducted a boys' military school in Tennessee, and that he has come into the business with some of the preconceived ideas concerning manufacturers that might be considered natural to a educator. He said that in the public mind there was a general opinion that manufacturers were about the most selfish, narrow, unscrupulous men in the world and that honesty among manufacturers was a rare thing. This he said he had found to be entirely untrue, and on the contrary the vast majority of manufacturers were basically honest; they did not want more than they were entitled to and were willing to be entirely fair with their fellow men.

The worst enemy of the manufacturer, he said, was the manufacturer's own self. By his inactivity and indifference to everything beyond his own self interests he was largely to blame for the false impression concerning himself. He said that among manufacturers there was a disposition to attribute too much power to money, to think that money would buy everything. He was too much inclined to allow his lawyer to do his thinking for him concerning everything except the handling of his money. He warned his hearers that this was blindness, and that they were vitally interested in other matters beyond their immediate business activities. "No business is stronger than the social structure that supports it," he warned them.

He spoke of the activities of the "reds," and the agitators of all sorts, and said few had an idea how great and well organized these efforts were. However, he said, that he himself was not much concerned about them; but what he was concerned about was the lack of interest in public matters and the lack of efficient organization among the men who should stand for all that good citizenship requires.

Mr. Edgerton told of the organizations and the activities of the labor unions, and said that he had discovered that $184,000,000 came annually into the treasury of the American Federation of Labor, and that this did not include funds raised for special purposes. The total amount paid in by manufacturers to all their different organizations in this country amounted, he said, to only $15,000,000 a year. He warned his hearers that the "enemies of industry" were well organized and well led. That they knew what they wanted, and knew how to go after it.

Manufacturers should be the real leaders in national affairs, Mr. Edgerton urged. They should cease to avoid responsibilities which belonged to them. Should cease to depend too much upon their lawyers, should look beyond their trade interests, and should realize the need of co-operation and organization. In conclusion he said that he did not intend to be simply a critic with nothing to suggest, but that he thought that the manufacturers of this country were finally beginning to wake up, and that their organizations were paving the way to an interest in vital matters beyond the ordinary affairs of business.

At half past nine the meeting was turned over to A. J. Wittenberg, chairman of the entertainment committee, and the members settled back in their chairs to enjoy a real Broadway show.

Chemistry Prizes Are Announced at Meeting

Allied Chemical & Dye Corpn. Gives $500,000 and Garvans Donate $10,000

MILWAUKEE, Sept. 12, 1923.

The foundation of an American Chemical Prize of $25,000 yearly by the Allied Chemical & Dye Corpn., which has given $500,000 for this purpose was announced yesterday by the American Chemical Society at its annual session in this city.

The prize is to be awarded the chemist of either sex in America, who, in a period to be determined, has made a contribution of outstanding merit to the science of chemistry.

The committee to carry out the conditions of the gift consists of Edgar F. Smith, provost emeritus of the University of Pennsylvania; Prof. C. F. Chandler, Columbia University; Dr. Ira Remsen, president emeritus of Johns Hopkins University; Dr. F. P. Venable of the University of North Carolina; and Dr. T. W. Richards of Harvard University.

The gift of $10,000 from Mr. and Mrs. Francis P. Garvan, in memory of their daughter, Patricia, for prizes to be awarded next July for essays on chemistry by high school pupils was also announced. The prizes will consist of six four-year scholarships of $500 a year and tuition, in chemistry or chemical engineering at Yale University or Vassar College, and six prizes of $20 in gold in each state of the Union, to be awarded secondary school pupils submitting the best essays on certain prescribed topics dealing with the relation of chemistry to various phases of American life.

Edward C. Franklin, president of the American Chemical Society has named a contest committee composed of H. E. Howe, chairman; W. D. Bancroft, Dr. Charles H. Herty and Alexander Williams, Jr. Headquarters will be established at 67 Wall street, New York.

Essays must be submitted before April 1, 1924. Winners will be announced not later than July 1, 1924. Essays must not exceed 2,500 words, and must be on one of these subjects:—"Relation of Chemistry to Health and Disease," "Relation of Chemistry to the Enrichment of Life," "Relation of Chemistry to Agriculture and Forestry," "Relation of Chemistry to National Defense," "Relation of Chemistry to the Development of the Industries and Resources of Your State."

So that reference works might be available, the Chemical Foundation, Inc., of which Mr. Garvan is president, has sent to 10,000 high schools and 2,000 libraries in the United States copies of these books: — "Creative Chemistry," "Life of Pasteur," "The Riddle of the Rhine," "Discovery, or the Spirit and Service of Science," and "The Future Independence and Progress of American Medicine in the Age of Chemistry."

Chemical Salesmen's Dinner to Have Distinguished Speakers

The third annual banquet of the Salesmen's Association of the American Chemical Industry will be held Thursday, September 20, at the Hotel Commodore, this city. Major General Henry T. Allen, who commanded the American Army of Occupation on the Rhine, will speak on modern chemical warfare and will tell of German chemical plants in the occupied territory.

Dr. Edgar Fahs Smith, provost emeritus of the University of Pennsylvania, and one of the most distinguished teachers of chemistry in this country will speak of the value of technical train to the salesmen.

Arrangements have been made to place company trademarks or club insignia over tables reserved by a single organization. A. J. Binder, of the Sherwin-Williams Co., 115 Broadway, this city, is chairman of the committee on reservations.

Nitrate Investigators Differ as to a Trust

Coordination of Federal Department Work Is Sought—Dr. Curtis Pushes Report

WASHINGTON, Sept. 13, 1923.

Following conferences with Dr. H. Foster Bain, director of the U. S. Bureau of Mines, Dr. Harry Curtis, chief of nitrate investigations for the Department of Commerce, is pushing work on his report on the nitrate situation to Secretary Hoover. It is understood that he will soon present a preliminary report to the Secretary, and this may be followed by more than one other report on various phases of the subject. The number has not been decided upon as yet. Secretary Hoover indicates that he will not report on the nitrate situation for some time after Congress meets. Dr. Curtis points out that the job of the Commerce Department has been largely one of gathering data, and he says that it is not unlikely that much of this collection will not be incorporated in his reports, but will be kept by the government for reference.

Rumors that American fertilizer manufacturers will be roughly handled by Dr. Curtis in his report are not confirmed. On the contrary, it is understood that Dr. Curtis has been fully informed about the great difficulties under which the fertilizer people have been laboring for a long time as a result of the general industrial depression. Today Dr. Curtis conferred with President Graff of the American Nitrogen Products Co., Seattle.

Differences in Reports

Dr. Curtis declares that there is no special significance connected with the apparent failure of the government to coordinate its several branches in dealing with the subject of nitrate or with the apparent difference between the Department of Agriculture and the investigators for the Commerce Department on the subject of control of the Chilean nitrate industry in particular.

"The Department of Agriculture and we, are in 99 per cent. agreement," declared Dr. Curtis today to tne Reporter correspondent. Continuing, he said:—

With reference to the proposition as a whole, there is the best of co-operation between the departments, and the fact that there is disagreement on one or two points is insignificant. I am in constant touch with the Agricultural Department, including the laboratory. I agree with Dr. Charles Brand of the Agricultural Department on 99 per cent. of his report on the situation as regards Chilean nitrates. In my opinion, Dr. Brand was misinformed on the point as to the alleged control of the Chilean nitrate industry and the fixing of prices for its products in London. His report was drafted in London and based on information he received there, and he had no means of checking it up. Our information from men on the ground in Chile is that the industry is controlled by Chileans and that prices are fixed in Chile.

At one time London control and price fixing might have existed, Dr. Curtis admits, but since the war the reverse is true, he said. "It appears that there has been an increase of control in Chile," he says, "through Chileans being able to buy up foreign interests in the nitrate industry and through the domicile of interests in Chile, originally foreign, but now become Chilean."

Dr. Curtis explained that British, German, Russian and other European nationals went to Chile many years ago to enter the nitrate industry. Many of these people have lived there ever since, became Chileans and have raised families which are Chilean. Then too, Chilean capital has purchased foreign holdings in the nitrate industry.

F. T. C. Trust Reports

The Federal Trade Commission appears to have started the talk about a Chilean nitrate trust. The commission has made two reports on the fertilizer industry in which it refers to the nitrate combine. One report dated 1916 reviews six combinations of nitrate producers, the last expiring in 1914. Again, March 3, 1923, the commission in a report to Congress also deals with the present Chilean Nitrate Producers' Association, formed in 1919.

In that report the commission said that "the price of nitrate of soda was fixed in the European markets." The producers' association of 1919, which expires by limitation about the close of this year, the commission report said:—

* * * was a trust of the most extreme type, controlling 96 per cent. of the present possible output of nitrate. This officially recognized trust for the purpose of producing and selling nitrate went further than any of the old combinations. It fixed the production quota of each plant, established all prices, and effected all sales, with absolutely no competitive conditions. The first work of the new association was to push up the price of nitrate to double what was said to be a remunerative figure. Then producers were intimidated in various ways. * * * Each year the prices are fixed by the association for the ensuing fiscal year, which begins July 1. * * *

This report was prepared largely under the supervision of H. L. Anderson, assistant chief examiner on the staff of the commission. Mr. Anderson stands by his guns today, declaring that the combine is "air tight," and he thinks that it will be renewed next winter. But Mr. Anderson does not agree with Dr. Charles J. Brand of the Department of Agriculture, who in a report early in the summer declared that the nitrate industry is controlled at London by British interests. It is understood at the trade commission that Chileans control the industry. It is learned that the investigator who gathered material for the nitrate section of the fertilizer report of the commission got most of his information from representatives of nitrate interests in New York and that he consulted freely with the Agricultural and Commerce departments before the report was drafted.

A suggestion was heard at the offices of the Federal Trade Commission that it would be glad to confer with other government departments interested in an effort to coordinate on the nitrate ques-

(*Continued on page* 83)

Japanese Relief Contributions From Oil, Paint, Drug, Chemical and Allied Trades

Companies and individual members of the industries covered by the Reporter have made the generous response to the call of the American Red Cross for funds to be used in aiding the people of Japan, which was to have been expected. The earthquake occurred but two weeks ago and yet, the contributions in this country, total several millions toward which oil, paint and chemical and allied industries have done their bit.

S. P. Fenn, vice-president and secretary of the Sherwin Williams Co., Cleveland, September 11, gave $500,000 to the international committee of the Y. M. C. A. Portions of this will be used to repair damage done to Y. M. C. A. buildings in Japan, as Mr. Fenn in making the gift specified that $450,000 was to be used for permanent buildings for the Y. M. C. A. in foreign lands.

A partial list of contributions made by members of the industries covered by the Reporter, follows:—

John D. Rockefeller, Jr.	$100,000
Laura Spellman Rockefeller Memorial Fund	100,000
Standard Oil Co. of New York	30,000
Standard Oil Co. of New Jersey	10,000
Standard oil Co. of California	10,000
American Trading Co	10,000
Anaconda Copper Co	10,000
Corn Products Co	5,000
Texas Gulf Sulphur Co	5,000
Mitsui & Co., Ltd	5,000
American Can Co	5,000
Fleischmann Co	3,000
Stein, Hall & Co., Inc	1,000
Oil, Paint & Drug Reporter	1,000
Carl L. Pforzheimer & Co	1,000
Charles Pfizer & Co., Inc	1,000
Coleman du Pont	1,000
Tide Water Oil Co	1,000
Benjamin Moore & Co	1,000
Union Tank Car Co	1,000
MacAndrews & Forbes Co	1,000
Alberene Stone Co	500
Mutual Chemical Co	500
Binney & Smith Co	500
L. C. Gillespie & Son	500
Lehn & Fink	505
Wessel, Duval & Co	500
Borne, Scrymser Co	500
Chesebrough Manufacturing Co	500
Dodge & Seymour, Ltd	500
Metal Sales Corpn	500
Harvey & Outerbridge	500
H. T. Sloane	500
Colgate & Co	500
Balfour, Williamson & Co	500
W. L. Rouse and New Jersey Lubricant Co	200
Standard Varnish Works	100
Seabury & Johnson	100
Textile Color Card Association	50
Sig Saxe	50
John Lucas & Co, Inc	50
John Jay Schieffelin	10
Dae Health Laboratories	10
Gleason Tiebout Glass Co	5
N. N. Moneypenny	100
H. Nordlinger & Co	100
Fairchild Bros. & Foster	250
William S. Gray & Co	250
H. A. Colgate	200
R. P. Dorland	100
E. W. Sinclair	100
Seabury & Johnson	100
Alpin J. Dunn	5
Brown, Edwards Co	5
William Zinsser & Co	250
Rudolph Zinsser	250
National Licorice Co	250
Vapo Cresolene Co	200
Morris Herrman & Co	100
Ledoux & Co	100
L. Sonneborn Sons, Inc	100
F. O. Pierce Co	50
Penn & Delaware Oil Co	25
William Jay Schieffelin	10
S. McV. Heminway	10
Standard Clay Co	10
L. S. Caddo Central Oil & Refining Corpn.	2
J. Kohnstamm	250
E. Kohnstamm	250
Carbona Products Co	100
International Oxygen Co	100
Enos F. Jones Chemical Co	200
Mrs. August Lewis, in memory of Dr. Takamine	200
Herman A. Metz	100
Kuttroff, Pickhardt & Co., Inc	250
Roger & Gallet	100
Federal Composition & Paint Co	25
Preservaline Co	25
James C. Smillie	25
Gilbert Colgate	200
Oil Trades Association of New York	100
Independent Salt Co	100
Warren Lubricant Co	25
Smith-Weihman Oil Co	25
Dennis E. Bergen	25
Craycroft Oil Co., Inc	25
Hudson Oil Co., Inc	25
Employes of the U. S. Asphalt Refining Co	20
Office force of U. S. Asphalt Refining Co.	10
American Celluose & Chemical Co., Ltd.	100
Columbia Refining Co	25
Bristol-Myers Co	250
Denver Chemical Manufacturing Co	100
U. S. Asphalt Refining Co	200
Adolph Hirsch & Co	100
New Jersey Zinc Co	95
W. J. Bush & Co	50
Compaigne Duval	10
Three in One Oil Co	300
Arcade Drug Stores	50
Employes of the Interstate Gasoline Co.	35
Penn Oil Co., Inc	10
Employes of the Smith, Kline & French Co	101
Philadelphia Wholesale Drug Co	100

Medical Supplies to Be Bought in Japan

U. S. Army and Navy Drugs and Medicines on Way to Earthquake Zone

WASHINGTON, Sept. 14, 1923.

In order to save time and effort in combatting fever and other epidemics reported to have started in the stricken districts of Japan, the American Red Cross is sending large sums, reported to be up to $1,000,000, to Japan for use there in purchasing medical and hospital and other relief supplies. Purchase will be made by American Red Cross representatives in Japan. U. S. Ambassador Woods in Japan cabled a suggestion that $1,000,000 be sent for purchase of supplies

Japanese surgical instruments will be relied upon largely to supply the demand in the stricken areas, so far as the American Red Cross is concerned, it appears. The Japanese had a well developed surgical instrument industry, which did much to supply the demands of America during the war period.

However, Dr. T. N. Phillips of the Red Cross supply service here, states that purchases of $50,000 worth of medical and hospital supplies have been made from the U. S. Army and an equal amount from other sources. These supplies, he believes, have already been shipped. They include over 10,000 clinical thermometers, 1,500 hypodermic syringes, 2,500 extra needles therefore, 2,000 bottles carbolic acid, 1,000 gallons cresol, 2,000 pounds plaster of Paris, 150,000 yards gauze, 20,000 pounds cotton, 50,000 yards muslin, 1,000 large bottles bichloride of mercury tablets, 30 autoclaves, 50 instrument sterilizers, thousands of instruments, enamel ware, 3,000 pairs rubber gloves, several thousand hot water bottles, fountain syringes and ice caps, and 250 small kerosene stoves.

The Red Cross has cabled to Japan asking what the requirements are in the line of biological serums and similar products. The Red Cross understands that these products have been manufactured to a considerable extent in Japan and it is believed that they are obtainable to some extent at Osaka and other manufacturing centers outside the earthquake zone. These serums will be needed largely in fighting typhus and other epidemics in the wrecked regions, it is believed.

Quantities of narcotics will also be needed there in treating typhoid fever and other diseases, and in ministering to the needs of the injured, it is believed. Considerable purchases of drugs and medicines are expected in drug trade circles to be made eventually by or for the American Red Cross, the Army and the Navy, which have been depleting their stocks to supply demand for relief purposes.

An announcement from the Red Cross headquarters says that $2,492,000 already have been expended from subscriptions to the Japanese relief fund, for food, clothing, medical supplies and other material, sorely needed in the devastated zone, and the purchase of additional supplies has been authorized by the Red Cross executive committee.

Commenting upon Secretary of Commerce Hoover's opinion that reports of economic loss have been exaggerated, Judge Payne and Secretary Hoover in a signed statement drew a distinction between that and the appalling human suffering that exists in the stricken regions. "The supplies of food, clothing, medicines, hospital service and material for construction of shelter have been destroyed in the larger centers," they said. "The problem, therefore, of American charity is to provide with the utmost expedition supplies of food, medicines and clothing, and to ship material for temporary shelter to provide solution for the destitution which follows from such a great disaster and dislocation."

The State Department has received a cablegram from American diplomatic representative in Japan stating that Jessie Benjamin of the Vick Chemical Co., New York, was among those reported missing.

After relief is extended to sufferers, it is indicated at the White House that the United States Government will take up the question of helping the Japanese Government in the rehabilitation of that country. It is expected that the assistance of this government will naturally be more of a business than a charitable nature.

Drug Stocks of Japan

Chemical experts of this government believe that the decision of the Red Cross to rely upon Japan furnishing large portions of medicines, drugs and medical supplies to be supplied for distribution from American relief funds is wise. In Osaka it is declared that there are at least three large houses, namely those of Chobei Takeda, Shiono, and Tanabe, besides a number of smaller houses in Toshumachi, the chemical trade section of that city, where doubtless large stocks of drugs, fine chemicals, medicinals and medical supplies are available.

In speculating on the probable effect of the Japanese disaster upon American trade with Japan it is borne in mind that the bulk of American imports from that country consists of silk valued at $291,000,000 in 1922 out of total imports of $354,000,000. Tea was second in value amounting to $9,500,000. Other imports include camphor, menthol, pyrethrum flowers, agar agar.

American exports to Japan last year totaled $218,510,000. Among the important items sold to Japan from this country during the fiscal year ending June 30 last were:—Chemicals and fertilizers, $6,079,000; gas, fuel and lubricating oils, $4,239,000; mineral oils, $3,989,000; copper, $1,311,000. It is believed that there will be a large Japanese demand for tin and copper, lumber, glass and other materials for construction purposes. Little paint is used in Japan.

To assist in the heavy work in connection with Japanese relief and reconstruction, Julean Arnold, U. S. Commercial Attache to China, has been ordered from Peking to Tokyo, temporarily. James F. Abbott, U. S. Commercial Attache to Japan, is ill and American commercial interests in that country are further handicapped by the fact that Elwood Babbitt, Trade Commissioner, who had just landed in Yokohama the day before the disaster, is now coming back to the United States. Mr. Babbitt's daughter was killed in the disaster.

An urgent message has been received at the Japanese Embassy here from Tokyo saying that heating apparatus of all types and gasoline are badly needed in the devastated areas. This request was under consideration at the Red Cross today. It was stated there that gasoline may be bought out of the $1,000,000 transferred to Japan by the Red Cross for relief purposes. It is believed that oil and gasoline can probably be obtained in the Orient sooner than from the United States.

Where You Can Sell

Ready Reference Guide for Sales Executives Fields for Exploitation of Chemicals And Allied Products

Preserve This List for Reference—Others Will Be Printed Herein at Frequent Intervals

Sixty-fifth Installment

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Amino Naphthol Disulphonic Acid 2-8-3-6
(2 R Acid)

DYE.—As a starting point in the manufacture of synthetic dyestuffs, such as trisulphur brown B, G and GG, direct black V, Columbia black B and R, aro orseille R, direct indon blue R.

PHARMACEUTICAL.—As a starting point in the manufacture of synthetic drugs, such as the urea derivative.

Barium Cyanide

METALLURGICAL.—As a reagent in various metallurgical processes and treatments.

ELECTRICAL.—As an ingredient of electroplating baths to eliminate carbonate of soda.

CHEMICAL.—As a starting point in the manufacture of platinum-barium cyanide; treated under pressure with carbon dioxide to manufacture formate of barium.

MISCELLANEOUS.—In X-ray work.

Chrysarobin
(Araroba)

PHARMACEUTICAL.—As a medicament; as an ingredient of pharmaceutical pomades; as a starting point in the manufacture of chrysophanic acid.

Cuprous Cyanide

PHARMACEUTICAL.—As a drug and as an ingredient of pharmaceutical preparations.

METALLURGICAL.—As an ingredient of the electrolytic bath used in the deposition of copper in galvano-plastic work.

INTERMEDIATES.—As a cyanogenation agent in the synthesis of many intermediate chemicals.

MISCELLANEOUS.—To introduce the cyanide radicle in the synthesis of dyes, drugs and perfumes.

2-5 Dichlorphenyl Hydrazone-4-Sulphonic Acid

DYES.—As a starting point in the manufacture of dyestuffs, such as xylene yellow 3G.

Dika Butter

FUEL.—As a raw material in the manufacture of candles.

SOAP.—As a raw stock in the manufacture of special soaps.

FOOD.—As a food and as an ingredient of food preparations.

Dipropyl Barbituric Acid

PHARMACEUTICAL.—As a drug and in various pharmaceutical preparations.

Indian Berries

PHARMACEUTICAL.—As a medicament and as a source for the extraction of pharmaceutical preparations.

INSECTICIDE.—As an ingredient of preparations used to remove vermin.

Naphthol Disulphonic Acid 2-3-6
(R Acid)

INTERMEDIATES. — As a starting point in the manufacture of various intermediate chemicals, such as naphthylamine disulphonic 2-3-6, 2-3 dioxynaphthalene, 2-3 dioxynaphthalene-6-sulphonic acid, 2-naphthol-3-disulphonic acid.

DYE.—As a starting point in the manufacture of numerous synthetic dyestuffs, such as azogrenadine L, amaranthe, naphthol black 6B and B, Poncea dyes, orange III, fast red, acid alizarine red B, cloth red B, naphthol black, brilliant crocein 9B, congo blue 2B.

PHARMACEUTICAL.—As a starting point in the manufacture of aluminol, the aluminum salt of naphthol disulphonic acid 2-3-6.

Oyster Shell
(Ground)

FERTILIZER.—As an ingredient of fertilizing compositions.

PAINT AND VARNISH.—Manufacture of phosphorescent colors for paints and varnishes.

MISCELLANEOUS.—In feeds for chickens, ducks and the like.

Phenyl Cinchonine Acid

PHARMACEUTICAL.—As a drug and as an ingredient of pharmaceutical preparations; as a starting point in the manufacture of isatophan, metholyl derivative, paratophan, methyl phenyl cinchonine acid.

Phenyl Ethyl Barbituric Acid

PHARMAECUTICAL.—As an hypnotic drug.

Phosphoric Acid
(Anhydrous)

CHEMICAL.—As a starting point in the manufacture of various phosphoric acids.

INTERMEDIATES.—As a general dehydrating agent in the manufacture of various synthetic compounds.

PHARMACEUTICAL.—As a drug and an ingredient of pharmaceutical preparations.

MISCELLANEOUS.—As a dehydrating agent in the manufacture of synthetic dyes, drugs and perfumes and in inorganic chemical processes.

(Glacial)

PHARMACEUTICAL.—As a drug and as an ingredient of pharmaceutical preparations.

ANALYSIS.—As a reagent.

CHEMICAL.—As a starting point in the manufacture of phosphates.

Phosphotungstic Acid

ANALYSIS.—As a reagent.

Picramic Acid

EXPLOSIVES AND MATCHES.—As an explosive agent; in military work; as an ingredient of explosive compositions.

DYE.—As a starting point in the manufacture of various dyestuffs, such as the azo colors, anthracene acid brown R, chrome brown P, Bordeaux metachrome, anthrocyl chrome green.

Pyroligneous Acid

CHEMICAL.—As a starting point in the manufacture of lime acetate, methyl alcohol and other chemical preparations.

DYE.—Manufacture of various dyestuffs.

FOOD.—Manufacture of vinegar.

METALLURGICAL.—As iron liquor for various purposes.

PHARMACEUTICAL. — In liniments, especially for veterinary use.

Pyromucic Acid

INTERMEDIATES. — As a starting point in the synthesis of intermediate chemicals.

MISCELLANEOUS. — As a starting point in the synthesis of drugs and dyes.

Pyrotartaric Acid

INTERMEDIATES. — As a starting point in the synthesis of intermediate chemicals.

MISCELLANEOUS. — As a starting point in the synthesis of drugs and dyes.

Quinic Acid

PHARMACEUTICAL.—As a drug and in various pharmaceutical preparations; as a starting point in the manufacture of various quinate pharmaceuticals, such as lithium quinate, quinate of piperazine, quinate of urea, quinate of urotropine.

Quininic Acid

INTERMEDIATES. — As a starting point in the manufacture of intermediate chemicals.

PHARMACEUTICAL.—As a starting point in the manufacture of synthetic drugs.

Racemic Acid

INTERMEDIATES. — As a starting point in the manufacture of synthetic chemicals.

MISCELLANEOUS. — As a starting point in the manufacture of synthetic dyes, drugs and perfumes.

Radium Bromide

PHARMACEUTICAL.—As a medicament in the treatment of cancer and similar diseases.

PAINT AND VARNISH.—In admixture with sulphide of calcium to manufacture luminescent paints, varnishes and enamels.

Resinic Acid

SOAP.—As an ingredient in the manufacture of special soaps.

PAPER.—As a sizing material added in the beater in paper making.

PAINT AND VARNISH.—Manufacture of driers and varnishes.

Ricinoleic Acid

TEXTILE.—Manufacture of textile finishing and sizing preparations; waterproofing textile fabrics.

OILS AND FATS.—Manufacture of turkey red oil.

SOAP.—As a raw material in the manufacture of textile and other special soaps.

Resorcylic Acid

DYE.—As a starting material in the manufacture of various azo coloring matters, such as oxazines and anthrachrysone.

Tonga

PHARMACEUTICAL.—As a drug and as an ingredient of pharmaceutical preparations.

Tolylhydrazin
(Para)

INTERMEDIATES. — As an intermediate product in the manufacture of tolupyrene.

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"Save the surface and you save all" Paint & Varnish

ADHESION

Anaconda White Lead particles are so extremely fine that paint made with it establishes perfect contact with the surface covered. Some particles are drawn into the pores of the wood with the oil, firmly anchoring the film to the surface.

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The Glidden Co., Cleveland	T. L. Blood Co., St. Paul	Forest City P. & V. Co., Cleveland
Heath & Milligan Co., Chicago	Twin City Varnish Co., St. Paul	Nubian Pt. & Var. Co., Chicago
Adams & Elting Co., Chicago	American Pt. Wks., New Orleans	The Glidden Co. of Mass., Boston
A. Wilhelm Co., Reading	Campbell Pt. & Var. Co., St. Louis	The Glidden Co. of Texas, Dallas

"SAVE THE SURFACE AND YOU SAVE ALL"—Paint & Varnish

WOOD SURFACES | PLASTER SURFACES | CONCRETE SURFACES | MANUFACTURED PRODUCTS SURFACES | METAL SURFACES | BRICK SURFACES

Paint and Varnish Materials

Advancing Pig Lead Market Holds Lead Pigments Steady—Few Price Changes—Building Figures for Last Month

In spite of the fact that there continues to be a manifest indisposition to stock up from one end of the paint industry to the other, a very satisfactory business is being done in most lines. One man prominent in the industry remarked last week that people in this country had become so accustomed to a rush of business that they were disposed to complain unless sales for each month were larger than ever before. Car loadings, the building record and the private reports to the big manufacturers show that business in this country is good. The paint industry has known prosperity for a long time, and the outlook for the future is bright. Some of the best informed men in the trade see virtue in the character of the buying at the present time. The manufacturer who hesitates about carrying large stocks of raw materials can understand the viewpoint of his customers, who are not willing to load up with stocks of finished products, but as long as consumption is good this means a steady day-to-day demand that is better in many ways than alternating periods of feast and famine.

The fact that lower prices are hoped for is undoubtedly one reason why buyers go slow. They feel certain that advances are not to be expected, and that if they are not able to buy cheaper later on they will not have to pay any more. So they are willing to wait just as long as it is possible for them to do so. Prices matter more today than they used to, and the fact that there is a disposition to buy closer is one of the evidences that business conditions are getting back to normal.

Some declines have recently occurred in the dry color market, but in the main prices of paint materials have held steady for a long time, and sellers are not inclined to encourage the belief that there is a probability of price changes of any importance during the remainder of the year.

Consumption of paints on new structures has been greater than that for repainting, and the paint industry watches reports of building contracts with the greatest interest, and these reports continue most encouraging. The decline in construction volume, which began in June, continued through August, according to the Dodge Corporation. However, the August drop from July was only about 1 per cent. Total August building contracts in thirty-six Eastern States, including about seven-eighths of the total construction volume of the country, amounted to $298,629,000. In twenty-seven States for which records were kept last year, the drop from August, 1922, was 15 per cent. In these twenty-seven States construction started during the first eight months of this year has been just equal to the amount for the corresponding period of last year.

Last year was a construction record breaker, but this year started with such a rush that on June 1 it was 15 per cent ahead of 1922, and since June there has occurred the falling off that brings the two totals together. It was predicted that there was going to be so great a slump in building activities this summer that the showing actually made is considered most satisfactory. Labor in the building trades is well employed in all parts of the country, with a pressing demand for more skilled workmen in many sections. The gradual decline in construction volume since May has taken place in an orderly manner, with a continuation of relatively large building volume. It has been accompanied by a gradual decline in cost levels. Contemplated new work reported in the thirty-six States last month amounted to $508,484,000, a decline of 10 per cent from the amount reported in July.

There was a great deal of difference in the showing made in different sections of the country last month, and this is of particular interest to large distributors in the paint industry who cover the whole country. In the New England States August building contracts totalled 10 per cent. more than those of July; in New York and northern New Jersey there was a decrease of 1 per cent.; in the Middle Atlantic States, there was a drop of 10 per cent.; in the Pittsburgh district there was a decline of 18 per cent. from the July figures; in the Southeastern States there was an increase of 12 per cent.; in the Central West there was a decrease of 12 per cent., and in the Northwest a decrease of 8 per cent. The best showing was made by the Eastern and Southeastern States.

There was not much change in the market last week. Another advance of 10 points in the price of pig lead made the position of lead pigments firmer, but lead will have to go higher than it is today to justify any advance in pigment prices. All pigments held unchanged during the week. Some consumers of lithopone seem to be expecting a price reduction in that market, and are inclined to hold back until a formal announcement of quotations for the last quarter of the year is made by producers. Barytes and zinc oxides showed little change, and both are moving well for this season of the year.

In the dry color market there continues to be some price shading as a result of sharp competition. Makers are busy, however, and the selling agent for one of the largest producers said last week that his corporation was producing to capacity in all the different lines of dry colors in which it operates, and has no accumulation of stocks in any line. Important price reductions have recently been made in some lines of chemical dry colors, and this seems to have encouraged consumers to hope for further price reductions, but none of any importance was announced last week.

Demand for mixed paints continues active enough to prove that stocks in dealers' hands at the present time are small, and while there is no disposition to stock up, small stocks make for steady business.

Lead and Zinc

PIG LEAD.—Another advance of $2 a ton was announced by the leading factors on Thursday making the quotation for New York delivery 6.85c. a pound. The market had shown so much strength earlier in the week that the advance was not unexpected, and it was freely predicted that lead would soon be up to a 7c. level. Corroders now say that when the break from 8¼c. to 6c. occurred, they knew that the market has gone too low, and that this was the reason they made no effort to follow the full decline by cutting prices of pigments. While the lead market is strong at the present time, there is nothing that indicated that there is a chance of its going back to a level over 8c. East St. Louis was quoted, after the advance in the local market, at 6¾c. to 6.80c. a pound.

ZINC.—The zinc market was a little softer last week because of the fact that the August figures were considered bearish. Stocks of zinc increased 5,231 tons in August, and the surplus at the end of the month was 26,471, tons, as compared with 21,240 tons at the end of July. Low record for stocks was made in April, and at the end of that month they amounted to only 8,876 tons, the increase since that time being 17,495 tons. Production during August totalled 41,625 tons, against 43,065 tons in July, while shipments last month were 36,394 tons, against 38,998 in July. In August, 1922, the output was 31,423 tons, and shipments 38,412 tons, while the surplus was 21,629 tons. The quotation on New York delivery late in the week was 6.85c. to 6.90c. a pound and East St. Louis 6½c. to 6.55c.

Pigments

There was a good business doing in almost all sorts of pigments last week, and prices held steady and unchanged. Corroders seem to be very well content with the business of the day and hour and also with the outlook for the future, and there is just as good demand for zinc oxides as there is for lead pigments, while barytes and lithopone producers never before saw business as good at this period of the year as it is at the present time. No one now seems to expect any material change in pigment prices during the rest of the year, and there is little holding back in the hope of being able

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 3; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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A pure white water-ground, water-floated and bolted Missouri Barytes of the uniform quality and soft oily texture that characterizes the properly processed Missouri product.

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ORIGINATORS OF THE FAMOUS
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to buy cheaper later on, although distributors are not inclined to stock up, and consuming industries are buying only to meet their immediate requirements.

WHITE LEAD.—There was not much difference in the character of the white lead market last week from what it had been the week before, but this is only another way of saying that business was of satisfactory volume. There is undoubtedly a larger than normal consumption for this season of the year, and distributors who place orders generally want very prompt delivery. Stocks in first hands are smaller than is usual in September, and plants are generally operating to capacity. Prices hold unchanged, and there is less talk of the probability of a change than there was some weeks ago. Prices follow:—Dry, in casks, 8¾c. to 9¼c.; in oil, 100-pound kegs, less than 500 pounds, 11.85c. to 12.60c.; 2,000 pounds, 11.35c. to 12.60c.; 2,000 pounds to 10,000 pounds, 11.35 to 12.09; 10,000 pounds to 30,000 pounds, 11.35c. to 11.65c.; carload, minimum, 15 tons, 11.25c. to 11.34c.

WHITE LEAD (Basic Sulphate).—There was no change in the tone of the market or the character of the demand last week. Dry in casks was still quoted at 8¾c. a pound.

RED LEAD.—As long as pig lead continues to advance it is not to be expected that there will be any lower prices for any sort of lead pigments. The oxides are in fair demand, and red lead holds steady at the same level. Quotations follow:—Dry, in casks, 10.90c. per pound; in 100-pound kegs, less than 500 pounds, 14c; 500 pounds to 2,000 pounds, 12.60c.; 2,000 to 10,000 pounds, 12.09c.; 10,000 to 30,000 pounds, 11.65c.; carloads, minimum 15 tons, 11.34c.; in 100-pound kegs, less than 500 pounds, 15.50c.; 500 to 2,000 pounds, 13.95c.; 2,000 to 10,000 pounds, 13.39c.; 10,000 to 30,000 pounds, 12.09c.; carloads, minimum 15 tons, 12.55c.

LITHARGE.—There was a fair business doing last week, but the size of the orders was not very large as many large consumers now have supplies on hand. As with other leads there was no change in quotations. Quoted prices are unchanged. Quotations follow:—In casks, 10.40c. per pound; in 100-pound kegs, less than 500-pounds, 14c. per pound; 500 to 2,000 pounds, 12.60c.; 2,000 to 10,000 pounds, 12.09c.; 10,000 to 30,000 pounds, 11.65c.; carloads, minimum 15 tons, 11.34c.

ORANGE MINERAL.—There was no change in the tone of the market last week or in prices. Domestic is quoted at 13.90c. to 15c., English at 15c. and French at 17c.

LITHOPONE.—Consumers are showing more disposition to buy from hand to mouth at the present time and seem to hope for a lower price later on. The aggregate of the business doing, however, is good for this season of the year, and some orders are being placed for delivery during the last quarter of the year. While makers are accepting orders for delivery for 90 days from date, they have not as yet made any announcement as to the price for the last quarter. One of the leading producers remarked last week that his company was just as well satisfied that the buying at the present time should be hand to mouth as the company had no stocks on hand. There are receipts of foreign material coming in right along, and the total imports for 1923 promise to be rather larger than it was expected that they would be. Domestic is quoted:—In bags, 7c. per pound; in barrels, carload lots, 7c. to 7¼c.; in barrels, less than car lots, 7¼c. to 7½c. Imported is quoted at 6⅝c. to 7¼c., according to grade.

ZINC OXIDE.—The call for all sorts of zinc oxides continues good for this season of the year, and the market holds steady at unchanged prices. The large producers always accept orders for delivery three months ahead, and considerable future business is being booked. Quotations follow:—French process red seal, 9¾c. per pound; barrels, car lots, 10c.; barels, less than car lots, 10¼c.; green seal, bags, 10¾c.; barrels, car lots, 11c.; barrels, less than car lots, 11¼c.; white seal, barels, car lots, 12c.; less than car lots, 12½c.; leaded grades, American process, commercially lead free, in bags, 8c.; in barrels, car lots, 8½c.; less than car lots, 9c.; 5 per cent. lead sulphate, bags, 7¼c.; barrels, car lots, 7½c.; barrels, less than car lots, 7¾c.; 10 to 35 per cent. lead sulphate, bags, 7c. to 7¼c.; barrels, car lots, 7½c.; less than car lots, 7½c. to 7¾c. Imported green seal is quoted at 11½c. to 12⅝c., and imported white seal, French, at 13⅜c.

BARYTES.—There is a great deal of this material being used, and its popularity seems to increase. The demand all year has been good, and the total amount consumed during 1923 promises to be greater than in 1922, which was a very good year in the business. There is at present a demand that is fully up to the season, and prices hold steady. Missouri washed and floated is quoted at $28 a ton f.o.b. point of production, and Southern off color at $15 to $20 f.o.b. point of production.

BLANC FIXE.—The market held steady and unchanged last week. Dry is quoted at 4c. to 4¼c. a pound, and pulp at $50 to $55 a ton.

ASBESTINE.—No change in the price was made during the period. Good grade material is quoted at $13.50 to $14 f.o.b. point of production.

Dry Colors

The tone of the market last week was much the same as during the week before, and there was no further marking down of open quotations, although in some lines there was a good deal of gossip about price shading. The leading producers, however, are not engaging in this sort of thing. They have marked their prices down on iron blues, chrome greens and chrome yellows, and are not inclined to continue the marking down of colors which they claim are already too low. There is no doubt but that where price reductions have been made it has encouraged buying to a degree.

The dry color industry is well engaged at the present time. Plants are busy and stocks are not large. There is the same conservatism shown in the placing of orders that there is in other lines, but this does not prevent a good day-to-day business in the most popular colors, most of which are moving better than normal for this time of the year.

Blacks

There has been enough of a reduction in carbon black for immediate delivery to place the spot market in line with the contract market, and there is no disposition on the part of distributors to cut spots to a level that will be out of line with their contracts with their large customers. Consumption continues heavy, and there is a constant interest shown by exporters. Reports of new carbon black being projected in the Southwest continue to appear, and it seems certain that production next year is going to be very much greater than that of this year. Foreign buyers show an inclination to attempt to form connections with new producers and hope to be able to buy cheaper later on. If there was production heavy enough to fully satisfy the demand at a reasonable price, there is no doubt but that there would be a decided expansion of the export trade. Other blacks hold steady.

Quotations follow:—Bone, powdered, 5½c. to 7½c. per pound; black oxide, from 4½c. to 16c.; carbon gas, bags, f.o.b. works, contract, 13c. to 14c.; spot works, bulk, 14c.; spot, New York, cases, 15c.; special grades, 25c. to 45c.; charcoal, willow, powdered, 7c. to 9c.; common, 4½c.; drop, 7½c. to 16c.; lampblack, 12c. to 40c.; mineral blacks, $35 to $40 per ton.

Blues

One selling agent of iron blues said last week that he was still quoting 55c. a pound, but as he added that he was also naming 50c. when it was necessary to do so to meet competition, there was little difference in his position and that of competitors, for almost everyone in the business says 50c. is too low, and is only named to meet competition, of which there is plenty in this line. There was little change in the situation during the period. In spite of the reports that iron blues can be bought under 50c., no prominent producer is willing to sell under that price. There is a very good demand, according to most makers, and stocks are not large.

Ultramarine moves well in a routine way and is quoted at 8c. to 35c. a pound, according to strength.

Browns

There continues to be a steady call for siennas and umbers, both domestic and imported, and most handlers say that business is a little better than it was at this time last year. There was little change in the market for browns last week.

Quotations follow:—Italian sienna, burnt and powdered, 6c. to 14½c.; raw, powdered, 5½c. to 14c.; American, burnt and powdered, 3¾c.; American, raw, 3c.; Turkey umber, burnt and powdered, 4c.; raw, 4c.; American, burnt and powdered, 3c. to 4⅝c.; Vandyke brown, 4½c.; domestic Vandyke brown, 3⅛c. to 4c.

Greens

Chrome greens are under the same sort of pressure as iron blues and chrome yellows. The undertone of the market is not very firm, and buyers are inclined to look for price concessions. Producers, however, take the stand that these colors are cheap at quoted prices, and, having cut prices 2 cents not long ago, are reluctant to do any more cutting, which they claim is not at all warranted by production costs. The insecticide season being over, there is nothing doing in paris green at this time. The demand for the cheaper commercial greens holds up well.

Quotations follow:—Chrome green, chemically pure, light, 30c. to 32c. per pound; medium, 32c. to 34c.; dark, 34c. to 42c.; commercial, 12c.; grinders', 13c.; jobbers', 8c.; verdigris, 23c. to 25c.; paris green, 28c. to 30c.

Reds

Demand for the different sorts of reds is just about up to the season. While there is no rush to buy, there

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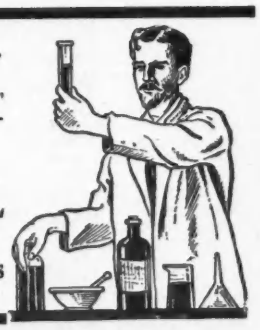

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is no reason for complaint as to the character of the demand, and prices hold steady. There was no change in the price of English vermilion last week, and there was a good demand for this color from makers of dental rubber, and others. The routine demand for Spanish oxide keeps up in a satisfactory manner.

Quotations follow:—Alizarine lake, concentrated, $2 to $2.25; carmine, No. 40, bulk, 11-pound tins, $4.75; amaranth, $4.75; crocus martus, 3½c. to 5c.; eosine, 70c. to 75c.; Indian red, English, pure, 12c. ta 15c.; American, pure, 8c. to 12c.; oxide red, 10c. to 14c.; domestic, 3½c. to 4½c.; Spanish, 3c. to 4c.; Para toner, concentrated, 100-pound lots, $1 to $1.10; commercial, 18c.; purple lake, $1 to $2; rose pink, 20c. to 32c.; toluidine toners, $2.10 to $2.25; Tuscan red, 17c. to 35c.; Venetian red, 3½c. to 6c.; vermilion, quicksilver, English, $1.20 to $1.25; American, 25c. to 30c.

Yellows

Some makers of chrome yellow are not yet willing to quote under 18c., but it can be bought from other leading producers at 17½c., and there continues to be the usual reports circulated as just how much under the market it is being offered by some people who do not make their quotations public property. However, the market has been in this position for so long now that it is an old story, and there was no particular change in the situation last week.

Quotations follow:—Chrome yellow, 17½c. to 18c. per pound; Dutch pink, 7c. to 12c.; iron oxide, yellow, natural, 3½c. to 5c.; precipitated, 9½c.; French ocher, 2c. to 3½c.; domestic, strong, 2½c. to 3c.; medium, 1½c. to 2c.; golden ocher, 4c. to 7c.; zinc yellow, 33⅓c.

Colors in Oil

While it is reported that in some lines prices can be shaded, producers do not seem in a hurry to announce new price schedules. In blues, greens and yellows price concessions might be made, and perhaps in some other colors. The demand continues fairly good, and the outlook is considered the same.

Quotations follow: — Black—Coach black, in Japan, 30c. to 35c. per pound; in oil, 25c. to 35c.; drop black, 25c. to 35c.; lampblack, 32c. to 44c. Blues—Chinese, 90c. to 92c.; Prussian, 82c. to 90c.; ultramarine, 50c. to 60c.; imitation cobalt, 55c. to 62c. Browns—Sienna, Italian, burnt or raw, best grades, 25c. to 31c.; Turkey umber, burnt or raw, best grade, 22c. to 29c.; Vandyke brown, genuine, 30c. to 32c. Greens—Chrome, chemically pure, 40c. to 71c.; commercial, 25 per cent., 24c. to 33c. Reds—Indian, 28c. to 34c.; Tuscan, 33c. to 47c.; Venetian, 18c. to 21c. Yellow—Chrome, 27c. to 35c.; French ocher, 20c. to 23c.

Driers

There was little change in the character of the market last week, although a little more interest was shown in manganese driers. The call for lead acetate is slow, and most other chemical driers move only in a routine way just now.

Quotations follow:—Aluminum oleate, fused, 17c. to 19c. per pound; palmitate, precipitated, 24c. to 25c.; resinate, precipitated, 12c. to 15c.; stearate, precipitated, 25c. to 28c. Calcium, linoleate, 7c. to 10c.; resinate, precipitated, 25c. to 37c. Cobalt, acetate, $1.12; carbonate, $2.07; hydrate, $2.65; linoleate, solid, 53c. to 65c.; paste, dried, 26c. to 35c.; resinate, fused, 21c. to 22c.; resinate, precipitated, 46c. to 52c. Lead acetate, 12c. to 13½c.; linoleate, solid, 20c. to 27c.; resinate, fused, 10c. to 11c.; resinate, precipitated, 15c. to 20c. Manganese, borate, C.P., 25c. to 35c.; borate, technical, 18c. to 25c.; oxide, 85 per cent., 5c. to 6c.; resinate, fused, 6c. to 8c.; resinate, precipitated, 13c. to 16c.; sulphate, anhydrous, 10½c. to 11c. Zinc, carbonate, 15c. to 20c.; resinate, fused, 8½c. to 9c.; resinate, precipitated, 12½c.; to 15c.; sulphate, crystals, 3½c. to 4c.; sternate, precipitated, 25c. to 32c.

Gold and Other Leaf

Prices of metal leaf have held steady all season, and promise to do so until the end of the year. There is no talk of distressed stocks breaking the market. Japanese leaf is a little firmer until it is seen to what extent exports from Japan will be interfered with. Japan does not export gold leaf.

Quotations follow:—XX deep, 3⅜ by 3⅜ in., $11 to $12; 3⅜ by 3⅞ in., $12 to $13; 3¾ by 3¾ in., $13 to $13.50; 4 by 4 in., $14.50 to $14.70; 4½ by 4½ in., $19 to $19.20; 3⅞ by 5 1-16 in., $17 to $18.95; silver leaf, $2.50; aluminum, $1 to $1.95; composition metal leaf, $1 to $1.25.

Other Paint Materials

There was little change in the markets for the various minor paint materials last week, and prices were on the same level as the previous week.

CASEIN.—There was little demand last week, and the demand has been slow for some time. Stocks are large, and consumers realize this and are in no hurry to buy. On the other hand holders do not seem to be willing to mark down the price in an effort to stimulate business. The market is quoted at 15½c. to 17c. a pound.

CHALK.—The price of cargo lots of chalk depends upon what it costs to bring it in and has changed little recently. The receipts about equal the demand and stocks on this side are not large. It is quoted at $5 to $5.50 a ton.

CHINA CLAY.—There is a steady routine demand and price for both imported and domestic hold steady. Imported is quoted at $16.25 to $23.25 a ton, and domestic at $15 to $16.50 f.o.b. point of production.

NAPHTHA.—There was no further cut in price of varnish makers' and painters' naphtha last week, but a decline of another cent is looked for. Consumption is heavy. It is quoted at 18½c. a gallon.

FULLER'S EARTH.—There has been an increase in the imports of this material, the demand from the South having been good recently. The consumption of domestic continues very heavy, and prices of both imported and domestic are firm. Iported is quoted at $23 to $25 a ton and domestic at $15 to $18, f.o.b. point of production.

PUTTY.—The demand is good for the season, and the market steady. Quotations follow:—Commercial, in tubs, $2.50 per 100 pounds; in 5-pound tins, $4 per 100 pounds; in 1-pound tins, $6 per 100 pounds; linseed oil, tubs, $6.50 per 100 pounds; in 5-pound tins, $8 per 100 pounds; in 1-pound tins, $9 per 100 pounds.

TALC.—The movement of foreign talc into this country continues heavy, and there is a good export demand for domestic. Both are in good demand and domestic consumption of both foreign and domestic increases steadily. Quotations follow:—Domestic, $15 to $18 per ton f.o.b. point of production; French, $20; high grade French, $40; Italian, $47 to $58.

WHITING.—The market holds steady at unchanged price. Quotations follow:—Commercial, $1 per 100 pounds; gilders' bolted, $1.10; extra gilders' bolted, $1.15; American paris white, $1.15, English cliffstone, $1.50.

Varnish Gums

One well-known man in the gum business said last week that varnish makers have not been very busy this summer, and that he is afraid consumers have rather large stocks on hand and plan to remain out of the market until prices come down. It is always Batavia dammar that is the bellwether of the varnish gum flock, and just now all interest is centered there. When this gum gets to a level where it shows strength then there will probably be a general price revision, but just at the present time importers are not anxious to change their quotations on other gums until they see just what is going to happen to Batavia dammar. Stocks are too large for the amount of business in sight, and the market was weak. The price of Batavia went down another cent to 25½c. to 26c. a pound, and it showed no strength at that level. It was rumored that something might happen to cause a further break, and buyers never like to come in on a declining market anyway.

The whole market is soft, and there does not seem to be as much optimism as there was a short time ago, for although the market was quiet then it was hoped that by this time it would show more life. Consumers have bought but little for some time, but they do not seem ready to begin buying yet, and bullish advices from producing countries do not help the situation. There is little afloat for this country at this time, however, and that helps matters some.

ASPHALTUMS.—Barbados, 9½c. to 16½c. per pound; California, $41.50 to $50 per ton; Cuban, $60 to $80 per ton; Egyptian, nominal; Gilsonite,, $58 to $65 per ton; Mexican, $22.50 to $30 per ton; Malta, $42.50 to $50 per ton; Texas, $15 to $25 per ton; Trinidad, $35 to $80 per ton; Venezuela, 2¾c. per pound.

COPALS.—Congo, amber, 18½c. to 19c.; dark amber, 11c. to 12c.; picture, 42c. to 45c.; sorts, 7c. to 8c.; white, 32c. to 35c.; East India, bold, 23c. to 24c.; Malina, bright amber, 20c. to 22c.; dark, hard, 19c. to 20c.; pale, 21c. to 22c.; chips, 9c. to 10c.; standard sorts, 11½c. to 13c.; Pontinak chips, 12c. to 15c.; No. 1, 20c. to 22c.; nubs, 15c. to 16c.; selected, fine, 25c. to 28c.

DAMMAR.—Batavia, 25½c. to 26c.; Singapore, No. 1, 35c. to 38c.; Singapore, No. 2, 25c. to 26c.; No. 3, 7½c. to 8c.

KAURI.—No. 1, 67c. to 68c.; No. 2, 42c. to 43c.; No. 3, 21c. to 23c.; ordinary chips, 20c. to 21c.; BX, 48c. to 52c.; B1, 34c. to 36c.; B2, 26c. to 2c.; B3, 21c. to 22c.; brown chips, ordinary, 15c. to 16c.; chips, extra, 25c. to 27c.; bright dust, 21c. to 22c.; brown dust, 9c. to 10c.; ordinary dust, white, 12c.

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to 13c.; X pale, 75c.; XX pale, 75c. to 90c.; XXX pale, 92c. to 95c.

ARTIFICIAL RESINS.—Paracoumarone resin, 10c. to 11c.; high acid ester gum, 8½c. to 9c.; low acid, 9½c. to 10c.

Glues

The market holds steady and demand is about up to the season. There will soon be an increase in domestic production, but stocks in first hands are small, even for this season of the year. Reports from most consuming industries are encouraging.

Quotations follow:—Extra white, 30c. to 40c.; medium white, 20c. to 26c.; cabinet, 19c. to 30c.; low grade cabinet, 16c. to 19c.; common bone, 11c. to 15c.; French, 18c. to 40c. per pound; fish liquid, $1.40 to $2 per gallon.

Window Glass

The hand factories have not yet made a wage agreement, but they have held a meeting and selected a wage committee, and hope to soon have the matter settled. There is a scarcity of skilled labor, but so many of the hand factories have put in machines that there will not be as much labor needed as formerly. There will be a few hand plants in operation before the middle of October. There has been little change in the character of the demand as yet, and jobbers are still holding back and seeking to balance their stocks before placing new orders. It seems that they are quite generally willing to make concessions to move some sizes.

There is enough building going an all over the country, however, to insure a good consumption during the fall and winter, and there is no talk of any change in discounts by producers. There continues to be a good demand for imported glass, and at the recent meeting of the hand factory owners it was decided to appeal to the workmen to try and produce a better quality of glass. An improvement in the grade of window glass of the cheaper sort by the big producers would be much appreciated by the consuming public.

Detroit White Lead Works Has Annual Sales Conference

DETROIT, Sept. 14, 1923.

Sixty division sales managers and salesmen attended the five-day annual sales conference of the Detroit White Lead Works at the Hotel Statler, which ended tonight. Sales and advertising plans for the coming year were discussed by Earl L. Hess, general manager; L. K. Schwartz, sales manager; Geo. H. Griffiths, secretary; S. M. Bell, factory superintendent; E. E. Ware, chemist; G. A. Martin, president; and C. M. Lemperly, director of publicity and advertising, of the Sherwin-Williams Co., the parent organization.

Entertainment features consisted of a dinner to the division sales managers on Monday evening, and a banquet for all Wednesday evening. The speakers at the banquet were Mr. Martin and Mr. Lemperly; M. W. Neal, vice-president, and A. M. Woodward, secretary, of the Acme White Lead & Color Works; and M. L. McKenna, general manager of the Peninsular Varnish Co. A gold watch was presented to Miss Harriet Vought, assistant to the secretary in appreciation of twenty-five years of faithful service.

Chicago Convention Golf Course a Scientific One

CHICAGO, Sept. 12, 1923.

J. N. Welter, chairman of the golf committee of the National Paint, Oil and Varnish Association, has been able to secure, for the men's tournament to be held October 17, in connection with the paint conventions, and the woman's tournament to be held on the morning of October 19, the course of the beautiful Park Ridge Country Club.

This club is situated in one of Chicago's characteristic home villages, Park Ridge, on the Wisconsin Division of the Chicago and Northwestern Railway. The club is about fifteen miles from the Drake Hotel, and accessible by the suburban railway trains and numerous paved roads. It is planned to transport players to the club in private cars along the Sheridan Road through the most attractive residence district of Chicago and Evanston.

The Park Ridge course is noted for its beautiful flowers and shrubbery. From a golfing standpoint it is one of the most efficiently and scientifically trapped courses in the country.

For the benefit of those who intend playing the course the following measurements will be of interest:—

Hole	Yards	Par	Strokes
1	398	4	10
2	408	4	8
3	546	5	1
4	487	5	8
5	190	3	16
6	365	4	11
7	325	4	13
8	459	5	5
9	210	3	14
Out	3388	37	—
Hole	Yards	Par	Strokes
10	432	4	7
11	356	4	12
12	135	3	18
13	424	4	9
14	153	3	17
15	454	5	6
16	423	4	2
17	185	3	15
18	453	5	4
In	3015	35	—

Four of the Chicago Paint Club's enthusisastic golfers, Beverly Hall, Anthony Cosner, Bill Sanders, and Dad Sheffield, are members of Park Ridge, which guarantees visiting golfers will be well taken care of.

Waldo Has New Color Factory

E. M. & F. Waldo, Inc., dry color manufacturer, has purchased the Muirkirk furnace in Prince George's county, Maryland, and has converted it into an up-to-date factory for the production of pigment colors. Work on the Muirkirk plant is nearly finished and production is about to start. Certain new processes have been developed and incorporated into the new factory by means of which a greatly improved quality of pigments will be produced, according to the company's announcement.

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EAGLE-PICHER

Naval Stores

Turpentine Higher With an Increased Demand—Southern Markets Stronger—Offerings Light—Rosin Also Firmer

Business in the local market for naval stores was more active last week, though there was little snap to trade. The improvement was sufficient to impart a firmer tone to the market, however, and at the close of the week turpentine was 7c. above the final quotation of the previous week, and most grades of rosin were slightly higher. Southern markets for both turpentine and rosin were firmer at the close of the week and an upturn also occurred in spirits abroad.

So far as the local market for turpentine was concerned, the offerings continued very light, and there was apparently no increase of consequence in offerings in primary centers. According to some in the local trade, stocks here are unusually small for this time of the year, and supplies in Southern markets do not seem to be increasing as rapidly as at this time last year.

There are some in the trade who predict a falling off in the movement of turpentine from the woods in the not distant future, as the demand for labor in the South for gathering the cotton crop is now greater than was the case a few weeks ago, while the increasing expansion in some lines of industry, it is contended, is likely to be reflected sooner or later in a diminished supply of labor for producing and moving turpentine. In this connection it is not without interest to note that a number of complaints have latterly been received from parts of the Southeast of a shortage of labor for handling the cotton crop.

The London market continued to display steadiness last week, but export demand for American spirits failed to show any increase, and in view of the fact that there has been a considerable gain in stocks of turpentine in that market recently, there are few who anticipate any improvement in foreign demand in the near future. Stocks in the English center, together with the quantity afloat and expected to leave this country in the course of the next few weeks, are apparently sufficient for the requirements of foreign consumers for some time to come

As to the outlook for domestic trade, there are some in turpentine circles here who are disposed to take a rather optimistic view of the prospects, contending that general business in this country is gradually expanding, that this improvement is likely to become more noticeable with the advance of the fall season, and that with stocks of turpentine in the hands of consumers and dealers small, an increase in demand is certain to develop sooner or later. Favorable reports continue to be received in regard to the condition of the paint industry. The demand has latterly increased and in some sections of the country the supply of painters is inadequate for the demand.

After slowing down for a time, building is again increasing, operations in some parts of the country being far above normal. The increased activity in construction work is attributed to the fact that the cost of building material and labor has been more stable in recent weeks, this having encouraged builders to push operations more actively. Reports from 252 cities in the United States indicate that building permits totaling $256,722,000 were filed in August, showing an increase of 10 per cent. over August last year and of 6 per cent. over July this year.

A development of interest in the rosin situation was a marked increase early in the week in shipments from Savannah. The general position of rosin, however, did not show much change. The movement into consuming channels on contracts continues steady, and although receipts at primary centers remain free, stocks are materially smaller than at this time last year, supplies in the Savannah, Jacksonville and Pensacola markets at the close of the first week of September being more than 50,000 barrels less than a year ago.

Turpentine

An improvement was reported in the demand for turpentine last week, though it was not very pronounced, many buyers still being disposed to adhere to a conservative course in making purchases. With Southern markets stronger, however, the tendency of prices was upward in the main and at the close of the week $1.02 per gallon was the prevailing quotation, showing an advance of 7c.

Offerings were light here and in the South. Local stocks are said to be small as a rule. The feeling in trade circles at the week end was rather more cheerful not only because of the advance in the market but also owing to what many regard as prospects for an improvement in business in the not distant future.

In the paint industry there is a disposition to take a more optimistic view of the outlook for trade. There has been some increase in demand of late and a further expansion in business is anticipated with the advance of the fall season. Reports from various parts of the country indicate that construction work is being pushed again after the recent curtailment of activity and it is believed that the consumption of turpentine in painting operations is going to be liberal for many weeks to come.

Savannah

SAVANNAH, Ga., Sept. 14, 1923.

Changes in turpentine prices were not very wide this week, but the market had a better tone. Demand continued rather quiet, but there is an impression that an improvement in business is likely to be witnessed with the approach of fall as encouraging receipts have latterly been current in regard to trade in some lines. Offerings were light. Following is a record of the market for the week:—

	Prices.	Sales.	Receipts.	Shipments.	Stocks.
Saturday	$0.88	56	333	345	15,540
Monday	.88	209	633	689	15,484
Tuesday	.88½	100	1,299	267	16,446
Wednesday	.89¼	106	370	180	16,833
Thursday	.92	191	680	14	17,409
Friday	.95	100	747	212	17,944

Jacksonville

JACKSONVILLE, Fla., Sept. 14, 1923.

The tone of the local market for turpentine was better, inquiries being more numerous, although actual business did not show much improvement. The movement from the woods continued rather free and stocks still showed a tendency to increase. Sentiment in trade circles regarding the outlook for business is rather more optimistic. Following is a record of the market for the week:—

	Prices.	Sales.	Receipts.	Shipments.	Stocks.
Saturday	$0.88	226	492	629	11,482
Monday	.88	186	499	538	11,443
Tuesday	.88	430	812	11	12,244
Wednesday	.89	181	538	...	12,782
Thursday	.92	191	681	550	12,913
Friday	.95	218	458	283	13,088

Chicago

CHICAGO, Sept. 12, 1923.

Buyers of turpentine have placed orders, but usually for less than car lots. The total for the week has been fairly liberal. Prices are unchanged at 95½c. for drums and $1.01½ for barrels in less than car lots. For tank car lots, Chicago, the present price is 87c.

London and Liverpool

Following were the quotations on turpentine in London and Liverpool for the week:—

	London. (Per cwt.) s.	d.	Liverpool. (Per cwt.) s.	d.
Saturday	69	6	72	0
Monday	69	9	72	0
Tuesday	69	6	72	0
Wednesday	69	6	72	6
Thursday	69	6	73	0
Friday	72	3	74	6

London Turpentine Stocks

Following are the stocks of turpentine in London as of August 25:—

	1923.	1922.	1921.
American	13,996	7,837	15,477
French	24	407	941
Totals	14,020	8,244	16,418
Delivered this week.	2,028	1,511	2,160
Since January 1	60,393	55,582	70,218

Rosin

Changes in rosin prices were confined within narrow limits in the local market last week, but the tone was firmer in the main, and at the close of the week most grades were higher, final prices ranging from $5.95 to $6 for B to M, $6.25 for N, $6.75 for W. G., and $7.25 for W. W.

Offerings of all grades continued light here, and there was apparently no pressure of offerings in southern

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 4; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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markets despite the fact that the movement from the woods to the seaboard continued on a liberal scale.

Stocks in the hands of consumers are declared to be small, as a rule, and there is a disposition among some in the local trade to take a rather optimistic view of the prospects for trade during the fall and winter months. Meantime there is a steady movement into consuming channels on contracts.

The following were closing rosin prices at New York in barrel units of 280 pounds each:—

	Last week.	Preceding week.
B	$5.95	$5.75
D	5.95	5.90
E	5.95	5.90
F	5.95	5.90
G	5.95	5.90
H	5.95	5.90
I	5.95	5.90
K	6.00	5.90
M	6.00	6.00
N	6.25	6.25
W. G.	6.75	6.75
W. W.	7.25	7.25

Savannah

SAVANNAH, Ga., Sept. 14, 1923.

The feature of the rosin market this week was a material increase in the shipments, over 11,000 barrels being moved out on Monday. The tone of the market was firmer, though changes in prices were generally unimportant. Offerings of all grades were light. The movement from the woods was still of rather liberal dimensions. Following is a record of the market for the week:—

	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
B	$4.47½	$4.47½	$4.50	$4.55	$4.60	$4.65
D	4.47½	4.47½	4.50	4.55	4.60	4.65
E	4.47½	4.47½	4.50	4.55	4.60	4.65
F	4.47½	4.47½	4.50	4.55	4.60	4.65
G	4.47½	4.47½	4.50	4.55	4.60	4.65
H	4.47½	4.47½	4.50	4.55	4.60	4.65
I	4.47½	4.47½	4.50	4.55	4.60	4.65
K	4.47½	4.47½	4.50	4.57½	4.62½	4.67½
M	4.47½	4.50	4.50	4.57½	4.62½	4.67½
N	4.70	4.97½	4.97½	4.80	4.85	4.95
W. G.	5.00	5.05	5.05	5.05	5.10	5.20
W. W.	5.05	5.10	5.10	5.12½	5.17½	5.25
Sales	1,482	2,042	1,164	2,584	1,454	1,525
Receipts	1,713	1,163	3,982	1,748	1,818	2,039
Shipm'ts	280	11,695	630	1,157	425	950
Stocks—	111,534	101,002	104,354	104,945	106,438	107,527

Jacksonville

JACKSONVILLE, Fla., Sept. 14, 1923.

The movement of rosin from the woods to this market continued liberal and there was a further increase in stocks. The feeling in the trade was better, however, and the tendency of prices was upward at times, though changes were not very sharp. The offerings of all grades were light and demand was fair. Following is a record of the market for the week:—

	Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
B	$4.50	$4.47½	$4.50	$4.55	$4.60	$4.65
D	4.50	4.47½	4.50	4.55	4.60	4.65
E	4.50	4.47½	4.50	4.55	4.60	4.65
F	4.50	4.47½	4.50	4.55	4.60	4.65
G	4.50	4.47½	4.50	4.55	4.60	4.65
H	4.50	4.47½	4.50	4.55	4.60	4.65
I	4.52½	4.47½	4.50	4.55	4.60	4.65
K	4.55	4.47½	4.50	4.57½	4.62½	4.67½
M	4.57½	4.50	4.50	4.57½	4.62½	4.67½
N	4.80	4.77½	4.77½	4.80	4.85	4.95
W. G.	5.10	5.07½	5.05	5.05	5.12½	5.20
W. W.	5.15	5.12½	5.12½	5.12½	5.15	5.20
Sales	506	1,360	1,426	1,000	890	1,067
Receipts	1,825	1,570	2,321	1,632	2,209	2,543
Shipments	685	1,330	...	...	8,600	4,756
Stocks—	120,828	121,068	123,389	125,021	118,630	116,397

Chicago

CHICAGO, Sept. 12, 1923.

The movement of rosin has shown some improvement without being what can be called very active. The business is largely in small lots. There has been little or no business from the paper mills, but the paint and soap makers have bought to some extent. Prices are practically unchanged. In less than car lots at the yards the prices quoted are:—B, $6.50; G, $6.50; M, $6.50, and W. W., $7.10.

London

Following were the quotations per cwt. on rosin in London for the week:—

	Common.		Water white.		Type G.	
	s.	d.	s.	d.	s.	d.
Saturday	13	0	16	6	13	6
Monday	13	0	16	6	13	6
Tuesday	13	0	16	6	13	6
Wednesday	13	0	16	6	13	6
Thursday	13	0	16	6	13	6
Friday	13	0	16	6	13	6

Liverpool

Quotations on common rosin during the week were as follows:—

	Per cwt. s.	d.
Saturday	13	3
Monday	13	3
Tuesday	13	3
Wednesday	13	3
Thursday	13	3
Friday	13	3

Other Naval Stores

TAR AND PITCH.—The market for tar retained the steady tone that has characterized it in recent weeks and prices continued to be maintained at former levels. There was not much snap to business, but in a jobbing way demand was fairly active and offerings were light. Sellers quoted $11 to $11.50 per barrel for both kiln burned and retort, according to quantity. There were no new developments of importance in the local pitch situation, the market being steady at $6 per barrel with a moderate demand.

PINE, ROSIN AND TAR OILS.—A rather better inquiry was noted for rosin oil though much of the business reported during the week was of a conservative character. The market remained steady at 45c. per gallon for first rectified, 47c. for second, and 52c. for third. There was a moderate demand for pine oil and with offerings light the market remained steady at 67c. to 72c. per gallon as to quantity. Tar oil was steady at 30c. to 50c. per gallon with demand fair.

GUM THUS.—Demand continued quiet but with supplies and offerings light the market was steady at $15 per 280 pounds.

Trade News Briefs

The fall tournament of the Produce Exchange Golf Club will be held at the links of the Knollwood Country Club, White Plains, N. Y., September 20.

The Ammonite Co., this city, has been organized by R. Morris Shreve, W. Schmidtmann and W. P. Ten Eyck for the manufacture of ammonia salts.

The annual meeting and election of officers of the New York Credit Men's Association will be held September 20 at 8 p.m. at the Hotel Astor, this city.

The Coca-Cola Co. has bought five four-story buildings at 259-271 Tenth avenue, this city, taking in the entire frontage between 25th and 26th streets.

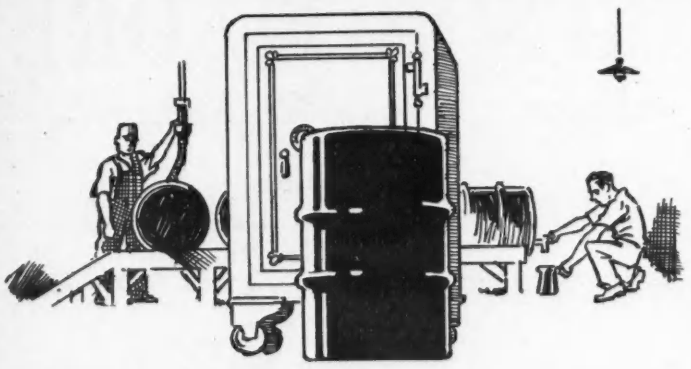
In the states of Jalisco, Puebla, Zacatecas, Chihuahua, Mexico, there are large fields of china clay and sands that can be used in the porcelain and glass industries.

Francis Levin, formerly teacher of chemistry and biology in the Lares High School, Porto Rico, has entered the employ of the Sterling Varnish Co., as research chemist.

Thomas T. Wilson, state senator, of Greeley, Colo., has been appointed collector of customs in Denver by President Coolidge. Mr. Wilson will relieve Collector Thomas H. Tulley.

S. J. Besthoff, E. J. Vilera and E. O. Chapotel, of Katz & Besthoff, druggists, New Orleans, left that city September 8 for an extended business trip in the northern and eastern part of the country.

The name of the Thompson, Munro, Robins Chemical Co. has been changed to Thompson, Hayward & Schlueter, Inc. H. H. Schleuter, formerly associated with the Meyer Bros. Drug Co., has joined the organization and will have charge of the St. Louis territory.



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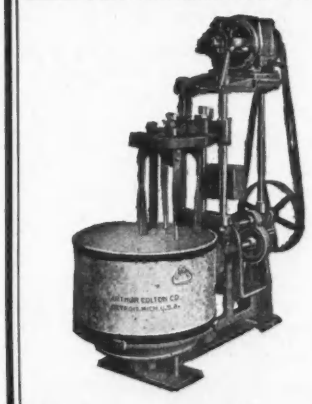

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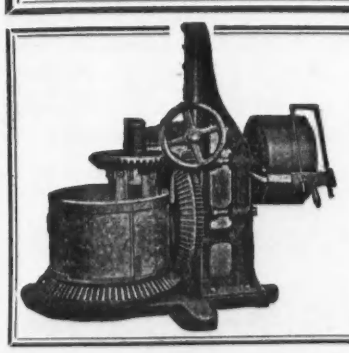

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Flaxseed and Linseed Oil

Bearish Government Estimate on Flaxseed Crop—Speculative Offerings Light—Prices Irregular—Oil Steady

The principal development of the past week in the market for flaxseed was the publication Monday of the monthly government report on the flaxseed crop. The figures showed a further increase, the estimated yield being 19,407,000 bushels, against 19,074,000 bushels a month ago, and 19,000,000 bushels two months ago. The condition of the crop was put at 79.0, against 82.4 a month ago. The report was considered bearish, but it had little effect on domestic markets for seed.

Private crop accounts were also bearish. Speculative offerings were light, and there was an increased demand for seed from crushers. Bearish crop reports were also received from Canada, the indications pointing to a yield considerably larger than last year.

The tendency of seed prices in Argentina was upward in the main, influenced by an increased foreign demand. The weather in that country was fine during the week. There was a decrease of 200,000 bushels in Argentine port stocks. Shipments from Argentina for the week were larger, the total for all destinations being 520,000 bushels, against 292,000 in the previous week. Since January 1 shipments have amounted to 39,349,000 bushels, as compared with 29,120,000 bushels in the same time last year. Shipments of seed from India during the week ended September 8 were 60,000 bushels to the United Kingdom and 144,000 to the Continent.

Linseed oil was steady. A somewhat better inquiry was noted in some quarters, but actual business was generally limited to moderate quantities. Flaxseed meal was firm, with the inquiry good and the offerings light. Cake was quiet.

Flaxseed

DULUTH, Minn., Sept. 11, 1923.

Market in flaxseed turned strong during the last week, a net gain of 5⅝ cents being recorded in the spot article. The reversal of form in the market, as compared with the two previous weeks, was brought about through the development of good demand from crushers for supplies. Deliveries of a few lots of seed on September contracts were readily taken and buying on the part of belated shorts was a factor in turning the market tide.

Deliveries of flaxseed from the country showed improvement and stocks in the elevators have been brought up to 150,000 bushels. A good quantity of flaxseed was brought to arrive during the week. Offerings were liberal, with farmers showing a disposition to take advantage of the current level of prices to realize upon their holdings. Anxiety in some quarters to obtain seed was indicated in 3c. over September being offered for spot seed. Good trading took place in the futures during the week and considerable contracts were made for October delivery. Advices received by dealers were to the effect that good progress is being made by growers in threshing. Expansion in the movement to the markets is expected to set in shortly. New flaxseed so far marketed on this market has averaged up well in grading, but the kernels have not been as plump as in some seasons, attributed to dry weather conditions over the Northwest.

The week's closing range was as follows:—

	Cash.	Sept.	Oct.	Dec.
Saturday	$2.33	$2.33	$2.33¼	$2.33¼
Monday	2.34½	2.31½	2.32	2.28¼
Tuesday	2.35¾	2.32¾	2.32¼	2.29¾
Wednesday	2.37¼	2.33¼	2.33½	2.29¾
Thursday	2.37	2.33	2.33	2.29
Friday	2.33½	2.31½	2.31½	2.31½

Daily receipts and shipments of domestic seed for the week ending September 11, 1923, and for the same week last year, in bushels, were:—

	Receipts		Shipments	
	1923.	1922.	1923.	1922.
Wednesday	7,851	10,206	....	....
Thursday	10,536	2,372	....	....
Friday	22,844	7,903	13,331	1,443
Saturday	9,869	13,368	....	3,960
Monday	19,618	17,463	6,764	98
Tuesday	21,708	27,363	....	....
Totals	92,426	78,675	74,095	5,501

Minneapolis

MINNEAPOLIS, Sept. 12, 1923.

The demand for cash flaxseed is stronger this week and prices gained some on the futures. Offerings were heavier, but there were more buyers in the market. Elevator companies were taking the heavy dockage stuff very freely for the screenings they could obtain by cleaning. Lately there has been a strong demand for screenings because of the sharp advance in millfeeds. Patent cattle food and poultry feed makers are inquiring freely for good screenings, and the elevators pay up to 15c. over for the kind of flax showing the heaviest dockage. In one case an elevator company was notified of the shipment of a car of flaxseed that contained 60 per cent. dockage.

This heavy dockage means that the receipts will have to show a much heavier bulk than last year in order to result in the same amount of actual flaxseed. There is a lot of pigeon grass seed in flaxseed coming from Minnesota, South Dakota and Central North Dakota. There is virtually nothing moving from the northern part of North Dakota yet, and the Montana movement is still to come. There is a good demand for flaxseed to arrive, with offerings on that basis dwindling because of the strong comparative prices being paid for spot offerings.

Eastern crushers are still buying Duluth futures for delivery in time to move supplies over the Lakes. Duluth has led the advance in futures prices. Locally there was very little demand, and offerings in the pit were virtually nil. The country is not hedging very much seed at present. Movement from the farms in Minnesota and South Dakota has subsided some. Central North Dakota movement is still rather good, but the present run of seed is not expected to last indefinitely.

Importations of Argentina seed are smaller and the bulk of the movement of the past week represented domestic seed. The Canadian crop report was bearish on flaxseed, indicating pretty close to 2,000,000 bushels more than expected a little earlier. However, the influence of this report was but temporary.

The week's closing range was as follows:—

	Sept.	Oct.	Nov.
Saturday	2.31	2.31	2.31
Monday	2.29	2.29	2.29½
Tuesday	2.29	2.29	2.29
Wednesday	2.31	2.31	2.30½
Thursday	2.32	2.31⅛	2.31½
Friday	2.30	2.30¼	2.30½

Daily receipts and shipments of domestic seed for the week ended Sept. 12, 1923, and for the same week last year, in bushels, were:—

	Receipts		Shipments	
	1923	1922	1923	1922
Thursday	53,710	16,120	7,000	5,000
Friday	82,530	20,040	7,000	2,000
Saturday	95,630	39,180	6,000	4,000
Monday	216,150	57,040	5,000	3,000
Tuesday	89,700	26,800	13,750	3,810
Wednesday	74,520	17,420	10,000	6,350
Totals	611,240	183,100	48,750	24,160

Winnipeg

WINNIPEG, Sept. 14, 1923.

There was some irregularity in flaxseed prices at times but the tone of the market was steadier in the main. Speculative offerings were lighter and shorts covered. Also there was an improvement in the demand from crushers. The feeling is still generally bearish, however, owing to the favorable crop reports and bearish advices from America and Argentina.

The week's closing range was as follows:—

	Cash.	Oct.	Dec.	May.
Saturday	2.05⅞	1.99¾	1.90½	1.95½
Monday	2.09½	1.98½	1.89¼	1.93¼
Tuesday	2.05	1.98	1.88	1.92¾
Wednesday	2.06	2.00	1.88	1.94
Thursday	....	2.00	1.89½	1.93⅞
Friday	2.07	2.00	1.86⅞	1.89¼

Canadian Flaxseed Statistics

For the week ended September 7 and for the season from September 1:—

STOCK IN STORE	Bushels.
Fort Williams and Port Arthur	149,082
Winnipeg elevators	....
Interior terminal elevators	1,462
Country elevators, August 31	38,416
Total	188,960
RECEIPTS DURING WEEK	
Fort William and Port Arthur	7,172
Winnipeg elevators	....
Interior terminal elevators	....
Country elevators	5,335
Total	12,507
SHIPMENTS DURING WEEK	
Fort William and Port Arthur, lake	335
Fort William and Port Arthur, rail	....
Winnipeg elevators, rail	....
Interior terminal elevators, rail	....
Country elevators, rail	4,531
Total	4,866
Total receipts, September 1 to date	
Fort William and Port Arthur	5,278

Buenos Aires

Fluctuations in flaxseed prices were confined within comparatively narrow limits with the tendency upward at times on an improvement in the foreign inquiry. The weather was generally favorable and crop prospects are reported good, but speculative offerings were light. There was a decrease of 200,000 bushels in port stocks for the week. Shipments to all destinations were larger and the exports since January 1 have exceeded the movement in the same time last year by more than 10,000,000 bushels.

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 3; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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Following were the opening flaxseed prices for the week on September contracts:—

	Last week.	Last year.
Saturday	$1.87½	$1.72½
Monday	1.90	1.69½
Tuesday	1.89½	1.64½
Wednesday	1.88¾	1.64½
Thursday	1.89	1.66½
Friday	1.89¼	1.64½

Following were the exports from Buenos Aires last week, the previous week and the corresponding week in 1922:—

	Bushels—		
To—	Last week.	Previous week.	Last year.
United States	316,000	128,000	40,000
United Kingdom	44,000	28,000	40,000
Continent	84,000	136,000	472,000
Orders	76,000	....	12,000
Totals	520,000	292,000	564,000

Shipments from January 1 to September 14, in comparison with last year, were as follows:—

	Bushels	
	1923.	1922.
United States	20,212,000	8,364,000
United Kingdom	2,612,000	2,802,000
Continent	11,805,000	13,356,000
Orders	4,720,000	4,598,000
Totals	39,349,000	29,120,000

The visible supply was:—

	Bushels.
Last week	1,600,000
Previous week	1,800,000
Last year	1,000,000

Indian Flaxseed Exports

	Week ended Sept. 8.	Previous week.	Since April 1.
United Kingdom	60,000	96,000	5,332,000
Continent	144,000	16,000	4,312,000
Totals	204,000	112,000	9,644,000

London

Following were the quotations on Calcutta flaxseed in London for the week:—

	Per ton		
	£	s.	d.
Saturday	20	7	6
Monday	20	10	0
Tuesday	20	10	0
Wednesday	20	5	0
Thursday	20	7	6
Friday	20	10	0

Hull

Following are Hull prices on flaxseed for the week:—

	Per ton	
	La Plata.	Calcutta.
Saturday	£19⅝	£20⅞
Monday	19½	20½
Tuesday	19½	21
Wednesday	19¼	20¾
Thursday	19¼	20½
Friday	19	20½

Antwerp

Following are the quotations on flaxseed in Antwerp for the week:—

	Per 100 kilos. francs.
Saturday	182
Monday	185
Tuesday	185
Wednesday	180
Thursday	180
Friday	180

Flaxseed Cake and Meal

The market for meal retained a firm tone, and some sellers in the Northwest were asking still higher prices, up to $48 per ton being demanded. Bullish influences were the strength of feedingstuffs in general, the high price prevailing for corn, and an increased demand. Some producers were not disposed to offer for early delivery. There were no new developments in cake, the market being quiet and steady.

Minneapolis

MINNEAPOLIS, Sept. 12, 1923.

Demand for oil meal is strong again and prices are advancing. The spot position is stronger and the deferred is much more so. Local mills are getting inquiry from a wide territory and are able to place about all of the meal they want to for shipment immediately and during the fall months. The advance in mill feeds, high price of corn and screenings and the general strength in the feed situation, is making a very favorable position for the crushers insofar as their by-product market is concerned. Shipping directions are good and the output of mills is moving promptly. Prices for spot quoted at $47 to $48 per ton, and deferred is selling at varying premiums, according to the time of shipment.

Daily shipments of linseed oil meal and cake, in pounds, for the week ending September 12, 1923, with comparisons of a year ago, were:—

	1923.	1922.
Thursday	1,198,205	432,700
Friday	432,895	241,440
Saturday	685,040	593,470
Monday	697,425	473,495
Tuesday	191,425	201,320
Wednesday	454,595	679,210
Totals	3,639,585	2,621,635

Total receipts, shipments and stock on hand:—

	1923.	1922.
Receipts	483,400	290,150
Shipments	43,000	54,000
Stock	44,664	62,217

Chicago

CHICAGO, Sept. 12, 1923.

There is no change in prices or conditions in flaxseed meal. Car lots are offered in limited amounts at $8 a ton, and less than car lots at $50 a ton, f.o.b. Chicago. For Minneapolis delivery crushers offer a price that is $1 a ton less than the Chicago price.

Linseed Oil

There was little change in the local linseed oil situation last week. Business was mainly of the same conservative character that has been noted recently, buyers still being averse in many cases to purchasing beyond their immediate or near-by requirements, owing to the favorable character of reports from the Northwest in regard to the flaxseed crop. Recent developments in domestic seed markets have had the effect of creating a more bullish feeling in selling quarters, but so far as consumers are concerned the action of seed prices has been offset by the bearish accounts in regard to the probable size of the flaxseed crop. At the opening of the week the government issued its monthly crop report, showing a further increase of 300,000 bushels in the indicated yield.

The market remained steady, with 88c. to 90c. per gallon demanded by crushers for spot oil in carload lots, cooperage basis. Smaller quantities were available at 91c. to 96c. per gallon, according to size of order. There was not much doing in futures, but the market was steady, with prices about unchanged, quotations ranging from 85c. to 86c. per gallon for October and 82c. to 84c. for November-April. Business in foreign oil seemed to be about at a standstill, and quotations were generally nominal. Offerings were light. At the close of the week cable advices received from London quoted bulk oil at 41s. 6d. per cwt., showing an advance for the week of 6d.

The trend of the Buenos Aires seed market was upward in the main, the net change for the week, however, not being very sharp. Fine weather prevailed in Argentina during the week, and the crop outlook in that country is considered favorable. There was a decrease in Argentina port stocks of 200,000 bushels. Exports from Argentina for the week showed a further increase. Crop news from Canada was bearish.

Reports from outside oil markets were more encouraging to local sellers. There was little change in prices, but the tone at some centers was firmer, with the inquiry rather more active and supplies of oil available for prompt delivery still unusually small. Some outside crushers still seem to have a good many unfilled orders on their books, and these are absorbing the bulk of the oil produced, so that there has been no accumulation of supplies in tanks. In Minneapolis at the close of the week spot oil was quoted at 87c. to 89c. per gallon, and November-April oil at about 83c.

Minneapolis

MINNEAPOLIS, Sept. 12, 1923.

Demand for linseed oil is fair to good. some of the crushers were able to put some good sales over during the past week, but a few thought that trade was a little slower in the deferred. Spot oil, in rather scant supply and wanted. Crushers are applying considerable of their present output on their old contracts, and for that reason have no important amounts to offer the trade for immediate shipment. Occasionally a big buyer comes into the market for a round lot for immediate and nearby shipment, but has to shop around considerably before wants can be filled. Shipping directions on maturing contracts are good and as yet the crushers have been unable to make any headway in the matter of creating a reserve supply in their local tanks. Cars are plentiful for moving the oil.

Prices quoted about the same as they were last week. Some crushers are asking more for spot offerings because they have nothing much to offer. Most of the quotations on deferred are about the same. Spot quoted at 87c. to 89c. per gallon, November-April shipment around 83c.

Daily shipments of linseed oil, in pounds, for the week ended Sept. 12, 1923, with comparisons a year ago, were:—

	1923	1922
Thursday	488,284	457,161
Friday	193,225	224,962
Saturday	448,465	904,390
Monday	310,049	350,393
Tuesday	367,500	390,270
Wednesday	633,303	336,124
Totals	2,410,826	2,663,300

Chicago

CHICAGO, Sept. 12, 1923.

There has been a little better demand for spot linseed oil, and some contracting has been done for futures. The larger producers have not changed their prices during the past two weeks, but some of the less important crushers have advanced their spot price to 84c. and have temporarily withdrawn their quotations on contracts. Paint and varnish makers have been placing orders a little more freely, and business with them is stated to show some improvement over recent conditions when it was generally stated that the mid-summer dullness was being overdone. Prices are as follows:—Spot oil in tank car lots, 82c.; car lots, cooperage, 87c., and warehouse deliveries, 90c. The basis of prices for contracts from October to April has been 73c.

Antwerp and London

Following were the quotations on linseed oil in Antwerp and London for the week:—

	Antwerp, per 100 kilos. francs.	London, Hull oil, per cwt. s.	d.
Saturday	382	42	0
Monday	382	42	0
Tuesday	385	41	9
Wednesday	385	41	6
Thursday	385	41	9
Friday	380	41	6

Synthetics Makers to Meet

The fine organic and medicinal chemicals section of the Synthetic Organic Chemical Manufacturers' Association will meet Wednesday, September 19, at 1 p. m., at luncheon at the Hotel Commodore, this city. After luncheon members will visit the Chemical Exposition.

The regular monthly meeting of the Board of Governors of the Association will be held at its headquarters, September 19, at 3 p. m.

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Cottonseed, Oil, Cake, Meal

Refined Oil Futures Irregular, Closing Slightly Higher on Bad Crop News—Southern Markets Stronger—Meal Firmer

The local market for refined cottonseed oil futures showed considerable irregularity last week, being influenced on the one hand mainly by bad cotton crop news, a further rise in cotton and strength at times in lard futures in the West, and on the other by better weather in the South, a setback in crude oil late in the week, and selling by local and southern traders and refiners. Business in crude oil was more active in southern markets and for a time the tendency of quotations there was upward, but demand was checked by the higher prices asked. A further advance occurred in meal.

The total transactions in refined oil futures on the New York Produce Exchange for five business days of the week were 105,400 barrels, as compared with sales of 72,000 barrels for four business days of the previous week, and with 76,700 barrels for five days two weeks ago. The net result of the week's fluctuations in prices was a small advance on most months.

Cotton futures in the local market were irregular, fluctuations being sharp at times. Last sales on Friday were at 27.70c. for October, 27.37c. for December, and 26.96c. for January, showing an advance for the week of about $4.50 to $6 per bale.

Cottonseed Cake and Meal

Southern markets for seed were firm in the main and in some sections further advances occurred in prices. Reports were current of sales in the Southwest at as high as $55 per ton in carloads, though in most cases quotations ranged from $45 to $47. In the Southeast, at the close of the week, $45 to $50 per ton was quoted for wagon loads and $50 to $53 per ton for car lots. Mills in some parts of the South were reported to be complaining about the poor quality of the seed. There was a better demand for meal and business was reported to have been closed in the Southeast on the basis of $40 per ton for 7 per cent. meal for September-October delivery. There were offerings $39 for November and December. Cake was nominal, owing to a lack of offerings.

ATLANTA, Ga., Sept. 4, 1923.

Because of the limited supply of cottonseed products on hand and because of the market advances on cotton, the Atlanta market showed marked increases along all lines. Some of the commodities are expected to adjust to lower prices as soon as the present crop harvest is well under way. Hulls and linters are both in peculiar situation because of the limited present supply.

The market on different cottonseed products range in prices as follows:—

Seed.—Limited supply; wagon sales, $45 to $50; carload lots, $50 to $53 a ton. Oil.—Spot and through September, 10¼c.; October deliveries, 10c. to 10½c. Meal.—Seven per cent. meal for September and October is selling at $40 a ton. Hulls.—Carload lots, spot, $18 a ton, with strong upward tendency. Future basis ranges $16 to $18. Linters—Advanced during week. First cut, 8c.; second cut, 5c.; run of mills, 6c. to 6½c.

Cottonseed Oil

The local market for refined cottonseed oil futures continued to show irregularity last week, the fluctuations being within a range of about 25 to 65 points, the sharpest changes being in the distant months. Early in the week the tendency of prices was upward in the main, with bad cotton crop news, a further sharp rise in cotton and strength of lard futures in Chicago the chief bullish factors. These things caused buying for both long and short account by local, Southern and Western traders.

Moreover, the tendency of cottonseed and crude oil was upward for a time in Southern markets, a good demand was reported for lard compound, and many other oils, fats and greases continued to display firmness. Further advances occurring in tallow, stearin and corn oil. Supplies of various oils and fats seem to be rather small. In parts of the South cottonseed rose $5 to $8 per ton, with the offerings generally light at the higher levels. There was a good demand for crude oil, sales being reported at from 10c. to 10½c. per pound for prompt and October shipment. In Texas, it was estimated by some 150 to 200 tanks of crude were sold.

Sales of tallow were reported at the highest price recorded for many weeks past. Lard compound was advanced 25c. to 50c. per 100 pounds by some interests. Makers of compound, according to some in the trade, are poorly supplied with cottonseed oil. The monthly report from the census bureau on the consumption of oil during August is due early this week, and many believe it will make a bullish showing. Exports of lard from this port were larger and some predicted that the Chicago statement of lard stocks for the half month would show a further decrease.

The weekly Government weather and crop was generally regarded as bullish, although it was in certain respects rather more favorable than some in the trade had expected. It stated that temperatures for the week averaged nearly normal except that it was too cool in the Western districts, and considerably above normal in the more Eastern portion. Rainfall was rather frequent in the Central and Western States, but there was much less rain in the Southeast, where it had been persistently wet most of the season. Sunshine was deficient from the lower Mississippi Valley westward, but generally adequate eastward.

Further rains occurred in Texas, with sunshine deficient. Cotton made further progress in the northern and western portions, but deteriorated elsewhere. Frequent rains lowered the grade in the central and southern portions with bolls rotting. In Oklahoma the weather was mostly fair, and cotton made fairly good progress. Some top crop develop in most sections. General condition of the crop, however, continued poor. In Arkansas excessive rains damaged cotton in some sections, but light to moderate showers in other portions of the state were beneficial, though weevil and other pests are still damaging.

Cotton showed further deterioration in Louisiana with seeds sprouting and grade lowering. In Mississippi the crop made unsatisfactory progress with lower bolls rotting, and little or no top crop. Continued rainy weather was unfavorable in Tennessee and Alabama. In Georgia drying, sunshiny weather was favorable, but it had little effect upon the crop because of enormous damage by weevil, worms, rust and shedding; entire top crop destroyed, and general condition of the crop exceedingly poor. There was likewise no improvement in North and South Carolina, the plant showing further deterioration in some sections, and onyl poor progress in others; late plants are still vigorous, but fruiting has stopped, and there has been heavy weevil damage.

Crop advices from private sources in the South were in many cases bad. A local report issued during the week put the condition of the crop at only 56 per cent., against 58 per cent. two weeks ago, and pointed to a yield of only 10,503,000 bales. Although the recent report from the census bureau on the ginning showed a larger quantity of cotton ginned to Sept. 1, than last year, the excess was due to comparatively large ginning in Texas, the returns from every other state in the cotton belt being smaller than last year. In Alabama the ginning to Sept. 1 was only 4,704 bales against 55,680 and in Georgia, 19,756 bales against 141,107 bales, while the total quantity ginned in all states outside of Texas was only 53,265 bales, against 241,232 bales in the same time last year.

Commission houses bought the fall and winter months. Some of the purchasing of October and December was attributed to Southern traders There was also some buying of near months, supposedly for account of refiners. Shorts covered in the fall and winter months. There is an impression in some quarters that the short interest has latterly been increased.

After advancing about 30 to 50 points, however, the market weakened and declined 10 to 20 points below the closing prices of the previous week on the more active months, with March showing the greatest decline. They have been doing this, according to the understanding of some, for two weeks or more. Moreover, the weather over

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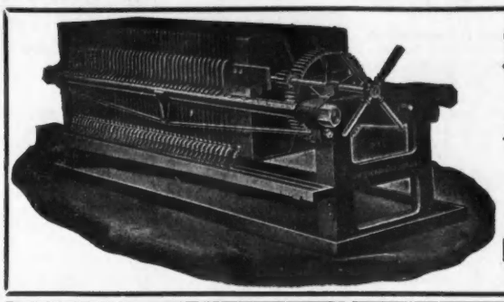

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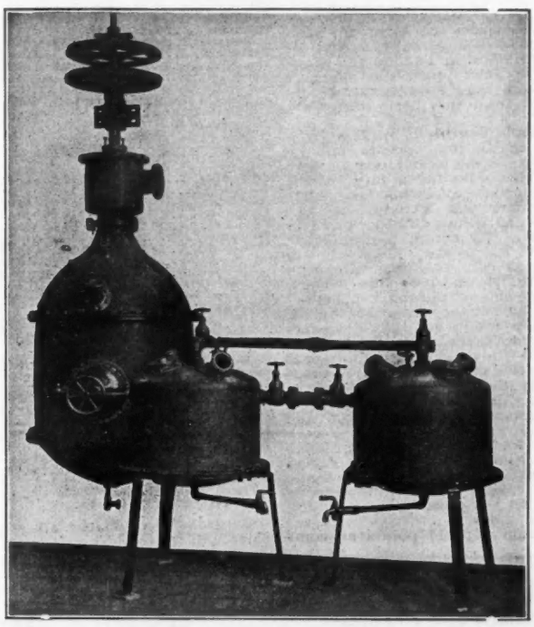

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Boreas, Prime Winter Yellow
Venus, Prime Summer White
Marigold Cooking Oil
White Clover Cooking Oil
Puritan Salad Oil
OFFICES: CINCINNATI, OHIO
Refineries: Ivorydale, O. Port Ivory, N. Y. Kansas City, Kan. Macon, Ga.
Cable Address: Procter Cincinnati U. S. A.

the cotton belt was better late in the week, cotton prices broke at times, and lard futures in the Chicago market reacted.

Furthermore, crude oil was easier in parts of the South late in the week, offerings being reported from Texas, the Valley and the Southeast at 10c. per pound, as compared with sales earlier in the week at as high as 10½c. The weather of late has been more favorable and the work of ginning the cotton crop is being pushed. The quantity ginned in Texas up to September 1 was 1,088,072 bales, or 523,115 bales more than in the same time last year. More encouraging crop reports were received from parts of Texas, and an improvement was also noticeable in crop accounts from some other parts of the cotton belt. In some quarters there was a tendency to revise estimates of the crop upward.

Live hogs in the Chicago market showed weakness at times. The movement of hogs at some points in the West, though smaller than recently, continued in excess of the movement at this time last year. The weight of the hogs remained heavy, the average weight of the arrivals in Chicago during the week ended September 8 being 258 pounds, against 251 pounds in the same week last year and 254 pounds two years ago. Demand for lard compound was less active late in the week at the higher prices prevailing. The tendency of American lard in Liverpool was downward, and at an auction of tallow in London the market was irregular, with the offerings large. There were no exports of cottonseed oil from this port during the week.

Local and Southern traders who bought recently took profits on the early bulge. Some local interests were credited with sales for a turn on the short side after liquidating long holdings. October was switched to December at 110 points difference and to November at 75 points; November to March at 32 points; December to March at 10 points. Some who were recently bullish are now less friendly to the long side of the market, believing that the advance in prices during the past few weeks has fully discounted whatever there is bullish in the situation. Others are bearish on the idea that the pressure of an increasing movement of seed will sooner or later have a distinctly weakening effect upon Southern markets for seed and oil.

Selling was not of an aggressive character, however, and on Friday there was sufficient bull support and short covering to cause an upturn in prices which left most months slightly higher for the week, the advance extending from 2 to 10 points as compared with the final quotations of the previous Saturday.

Following is a record of the week:—

MONDAY, SEPTEMBER 10, 1923.

	High.	Low.	Close.	Sales.
September	11.60	11.49	11.30@11.45	1,200
October	11.58	11.31	11.34@11.35	9,800
November	10.86	10.55	10.77@10.78	5,000
December	10.66	10.41	10.48@10.49	4,400
January	10.66	10.42	10.48@10.50	6,900
February	...	...	10.53@10.58	....
March	10.73	10.45	10.57@10.59	13,550
April	...	...	10.60@10.75	....

Spot (prime summer yellow), 11.00@11.50.
Crude (immediate Southeast), nominal.
Valley, nominal.
Texas, nominal.
Total sales, 40,800 barrels.

TUESDAY, SEPTEMBER 11, 1923.

	High.	Low.	Close.	Sales.
September	11.50	11.50	11.48@11.55	200
October	11.53	11.25	11.51@11.52	3,900
November	10.85	10.50	10.85@10.87	900
December	10.50	10.30	10.50@10.52	1,100
January	10.52	10.28	10.50@10.53	2,700
February	...	...	10.50@10.65	....
March	10.52	10.38	10.56@10.58	2,800
April	10.60	10.59	10.60@10.65	400

Spot (prime summer yellow), 11.50.
Crude (immediate Southeast), 10.00.
Valley, 10.00.
Texas, 10.25.
Total sales, 12,000 barrels.

WEDNESDAY, SEPTEMBER 12, 1923.

	High.	Low.	Close.	Sales.
September	11.50	11.47	11.45@11.60	700
October	11.45	11.37	11.38@11.39	3,400
November	10.75	10.67	10.68@10.69	4,200
December	10.42	10.38	10.33@10.35	1,200
January	10.44	10.30	10.32@10.34	4,600
February	10.50	10.50	10.35@10.40	100
March	10.50	10.40	10.39@10.40	4,700
April	...	...	10.40@10.50	....

Spot (prime summer yellow), 11.40@11.70.
Crude (immediate Southeast), nominal.
Valley, 10.50.
Texas, 10.25.
Total sales, 18,900 barrels.

THURSDAY, SEPTEMBER 13, 1923

	High.	Low.	Close.	Sales.
September	11.43	11.35	11.20@11.35	900
October	11.35	11.15	11.14@11.18	3,000
November	10.70	10.39	10.40@10.43	5,800
December	10.25	10.05	10.10@10.11	1,400
January	10.25	10.05	10.09@10.11	8,900
February	...	...	10.10@10.20	....
March	10.33	10.08	10.15@10.18	4,100
April	...	...	10.15@10.30	....

Spot (prime summer yellow), 11.20@11.50.
Crude (immediate Southeast), 10.00.
Valley, nominal.
Texas, 10.00.
Total sales, 24,100 barrels.

FRIDAY, SEPTEMBER 14, 1923

	High.	Low.	Close.	Sales.
September	...	...	11.35@11.50	....
October	11.31	11.20	11.24@11.25	1,600
November	10.60	10.45	10.50@10.59	600
December	10.25	10.15	10.23@10.25	1,200
January	10.27	10.17	10.23@10.28	2,000
February	...	...	10.28@10.32	....
March	10.39	10.20	10.38@10.48	4,200
April	...	...	10.40@10.50	....

Spot (prime summer yellow), 11.30.
Crude (immediate Southeast), 10.00.
Valley, 10.00.
Texas, 10.00.
Total sales, 9,600 barrels.

Saturday's cottonseed oil prices and sales will be found on page 2.

Chicago

CHICAGO, Sept. 12, 1923.

The continued and rapid advance of cottonseed oil in the producing sections is placing the buyers here in a position where they are at a less what to do. Many refused to buy, expecting a large cotton crop, and right now they are still insisting that prices are too high and continue to announce their intention of waiting for lower prices. The business, according to leading dealers, is of the hand-to-mouth order, and is for a car occasionally as they need it, and that this is the extent of the business. Sales of crude at 10¼c. were reported, with further advances following. Prime summer yellow is offered at 11½c., Chicago, in sellers' tanks, and "Fig" oil at 11¾c. There is very little refined, edible oil to be had. One buyer stated that an order for ten drums of prime white edible oil had been difficult to find. Prices for the refined product are nominally quoted at 13½c. for car lots, in barrels, and at 14c. to 14½c. for smaller than car lots. The range of prices here for the week has been as follows:—

	Open.	High.	Low.	Close.	Prev. week.
*Spot	$10.87½	$11.62½	$10.87½	$11.62½	$10.87½
Crude, Tex...	9.50	10.25	9.50	10.25	9.50

* Prime summer yellow.

Seattle

SEATTLE, Wash., Sept. 8, 1923.

There were active signs reported from the East on Chinese cottonseed oil for this week, but nothing in the way of Coast activities reflected this. Traders base their ideas on the 10c. asked price for c.i.f. lots received here some time back.

Hull

Following are the quotations on cottonseed oil in Hull, England, for the week:—

	Refined, per cwt. s.	d.	Egyptian crude, per cwt. s.	d.
Saturday	40	0	35	6
Monday	40	0	35	6
Tuesday	40	6	36	0
Wednesday	40	6	36	0
Thursday	40	6	36	0
Friday	40	6	36	6

American Cotton Oil Co. Becomes Gold Dust Corpn.

The latest development in the reorganization of the American Cotton Oil Co. was the announcement in a despatch from Albany last week that the company is to be succeeded by a new concern which is now in process of formation and which is to be known as the Gold Dust Corpn. The reported capitalization of the new company is $5,000,000 preferred stock and 325,000 shares of no par value common. It is expected that further details in regard to the reorganization will be made public this week.

The incorporators of the new company as given in the incorporation papers are George C. Sharp, William K. Lawe and Arthur H. Dean. These names have not appeared previously in connection with American Cotton Oil Co. affairs. According to reports current in financial circles, stockholders of the old company will be permitted to change their holdings for shares in the new company on the basis of one share of American Cotton Oil preferred for one share of Gold Dust preferred and three shares of Cotton Oil common for one share of Gold Dust common.

The sale of the American Cotton Oil Co.'s oil mills and other plants in the South and other sections of the country from time to time is said to have improved the financial condition of the company materially, enabling it to pay off its outstanding notes and providing sufficient working capital as well.

Boll Weevil Meet Postponed

NEW ORLEANS, Sept. 14, 1923.

The date of the national boll weevil conference which is to be held in this city has been changed to October 24. A change from the date first selected was necessary because it was found that it conflicted with the national conference of State governors. It is considered essential that governors of the Southern States participate in the weevil meeting.

Commissioners of agriculture from the cotton growing States, representatives of the United States Department of Agriculture and others who have had practical experience in boll weevil control work will meet here October 23, the day before the conference opens, to prepare a report to be submitted to the convention. C. G. Rives, Jr., president of the Louisiana Bankers' Association, who sent out the original call for the meeting, says that the committee has received gratifying data from persons who have successfully combatted the weevil, and this information will be given to the convention so that the entire nation may receive the benefit of it.

Trade News Briefs

C. F. Graff, president and general manager of the American Nitrogen Products Co., was called recently from Seattle to Washington to testify before the U. S. Tariff Commission. This company makes sodium nitrate with nitrogen from the air in its plant at La Grande, Wash.

Reservation cards are out for the annual meeting of the United Medicine Manufacturers of America, April 8 to 11, 1924, at the Hotel Driscoll, Washington, D. C. Rates, which include all hotel, convention and sightseeing charges, range from $50 to $55 for one person and $90 to $100 for two.

Chemical glassware was exported in August to a total value of $13,625, according to figures of the Department of Commerce. Exports of glass containers, bottles, vials and jars totaled $323,628. Quebec and Ontario were the best customers for the former, while Cuba led in the latter classification.

In order to stimulate interest in chemistry among high school pupils of Sacramento and the vicinity, the Sacramento section of the American Chemical Society, has offered a trophy in the form of a silver beaker, which on being won two consecutive years, becomes the property of the school whose chemistry team passes the best examination.

E. D. Gardner, mining engineer of the bureau of mines, department of the interior, has recently spent several weeks in the vicinity of Denver, Colo., conducting tests with liquid oxygen explosives in co-operation with an industrial concern. Besides making field tests, considerable work has been done toward developing a new low-cost cartridge as a carrier for the liquid oxygen.

Col. P. H. Callahan, of the Louisville Varnish Co.; L. R. Atwood and J. D. Burge, of the Peaslee-Gaulbert Co.; C. C. Stoll, Louisville refiner, and C. C. Prinz, manager of the Louisville division of the Gulf Refining Co., have been named as members of a special committee of the Kentucky Good Roads Association, to work for a $50,000,000 good roads bond issue before the next session of the State Legislature.

During the coming fiscal year the Department of the Interior, at the Intermountain experiment station of the Bureau of Mines, Salt Lake City, will investigate the matter of lead-zinc separation by concentration and flotation. A. J. Thompson, research fellow, has been assigned to this problem, and work has been started on a typical complex ore from the Park City, Utah, district. This work is in co-operation with the University of Utah.

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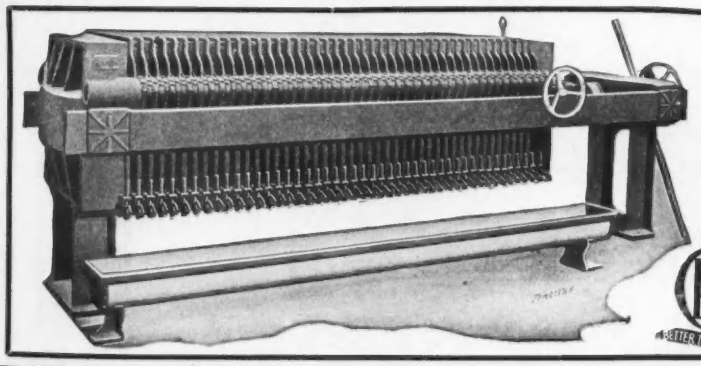

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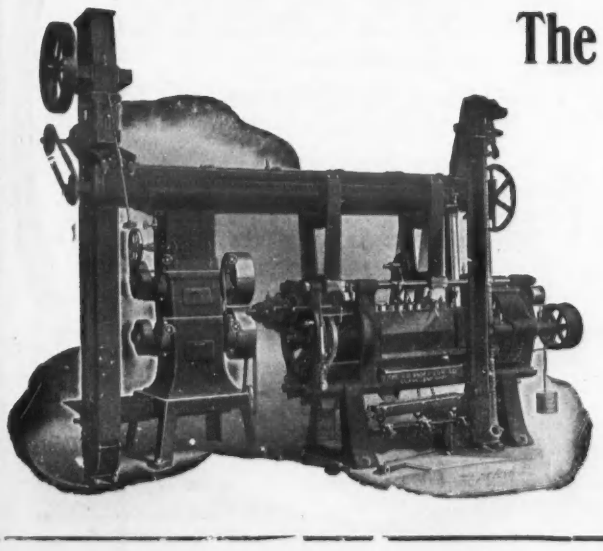

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Miscellaneous Oils

Crude Menhaden Oil Higher—Soya Bean Oil Stronger—Animal Products Advanced Further—General Market Firm

The strength of animal products was again a leading feature of the market for miscellaneous oils, fats and greases last week, though the general list also continued to be characterized by a firm tone. Business was rather less active on the whole than in the previous week owing largely to a reactionary tendency at times in cottonseed oil and a setback in the Chicago market for lard futures. Supplies of many products are light, however, and there was no increase in offerings on spot or for shipment.

China wood oil remained steady on spot, but occasional offerings for arrival were noted at slight concessions. The feeling among some in the trade with regard to the outlook for this oil seemed to be rather more bullish. Supplies in the hands of consumers are declared by some to be considerably below normal. The position abroad underwent little change, shippers apparently being firm in their views with offerings generally light. Changes in silver and Chinese exchange were confined within comparatively narrow limits.

Coconut oil was apparently firm at the recent advance. Offerings from producers on the Pacific Coast did not show any increase and some in the trade here take the ground that there is no likelihood of any material increase in offerings in the near future, owing to uncertainty concerning future supplies of copra and also because some producers have sold considerable of their output for delivery over the last quarter of the year. Supplies of resale oil on the Pacific Coast appear to be rather light.

Corn oil retained a firm tone despite the reactionary tendency of cottonseed oil at times. Offerings from producers in the West were light their output having been sold ahead for several weeks. There was a good inquiry, and sales were noted at a further advance. Palm oil was stronger, influenced by another advance in tallow. Spot supplies of both Niger and Lagos seemed to have been materially reduced and there was apparently no increase in offerings for shipment from the primary market.

Perilla oil was firmer, with the inquiry rather more active in a jobbing way and the offerings light on spot and for shipment. Olive oil was in fair request and prices remained steady for both denatured and edible. There were no new developments in rapeseed or sesame oil, prices being steady, with demand apparently limited to moderate quantities. Soya bean oil was in fairly active request and sales of crude were reported at a further advance. Mail advices from the Pacific Coast stated that a resumption of trading in vegetable tallow is expected next month.

A firm tone prevailed throughout the animal products group and in some cases further advances occurred. Stocks of some products appear to be unusually small. There was a fairly active demand, though actual transactions were generally on a moderate scale setbacks in cottonseed oil here and in lard futures in Chicago having a tendency to make some buyers disposed to hold aloof from the market pending further developments in the situation

Higher prices were demanded for tallow, with sales noted at the advance. Transactions were also reported in stearin and lard compound at higher levels. Stocks of cottonseed oil in the hands of makers of lard compound are said to be small. The movement of live hogs in the West, though smaller than a while back, was still larger than at this time last year and at times during the week the Chicago market for live hogs showed a weaker tone. The tendency of American lard in Liverpool was downward in the main, though changes in prices were not very sharp.

At an auction of tallow in London, the market was irregular, beef being firmer and mutton easier. Offerings at the sale showed a noteworthy increase, but there was also an improvement in demand. Exports of lard from this port for the week were rather liberal. Higher prices prevailed for lard, neatsfoot, oleo and tallow oils.

Red oil and stearic acid were firmer, owing to the strength of raw material, though prices lacked quotable change. Vegetable fatty acids are still in small supply, and quotations were nominal. Fish oils were generally well maintained at former levels. A rather better inquiry was noted for crude menhaden oil, and sales were reported at an advance. Reports in regard to menhaden fishing results were still distinctly bullish, and unfavorable accounts also continued to be received concerning the production of Newfoundland cod oil.

Advanced

Corn oil, crude, tanks, West, ¾c. per lb.
spot, ½c. per lb.
Grease, house, 1c. per lb.
yellow, 1c. per lb.
Lard, compound, 25c. 100 lbs.
city, 25c. per 100 lbs.
Menhaden oil, crude, tanks, 2½c. per lb.
Palm oil,
Lagos, ¾c. per lb.
Niger, ½c. per lb.
Palm kernel oil, ½c. per lb.
Perilla oil, spot, ¼c. per lb.
Soya bean oil, crude, spot, tanks, ¼c. per lb.
arrival, Pacific Coast, ¼c. per lb.
Stearin, lard, c. per lb.
oleo, ¼c. per lb.
Tallow, extra special, ¼c. per lb.
edible, ¼c. per lb.

Declined

China wood oil, arrival, ¼c. to ⅜c. per lb.
Pacific Coast, spot, ½c. per lb.

Index Numbers—26 Oils, Fats and Greases

The following index numbers have been compiled from 26 representative oils, fats and greases. The normal index number is predicated on the prices as of August 1, 1914:—

Normal—19.5

Last week.	Prev. week.	Last month.	Last year.
24.4	24.3	23.7	22.0

Vegetable Oils

A fairly active demand was noted for some products, but as a rule actual business was on a very conservative scale. Offerings were light, however, and prices were generally steady or firm.

CHINA WOOD.—Quieter conditions prevailed in the market for China wood oil last week, and there was an absence of developments of importance. There was nothing stimulating in advices from abroad, and many consumers were disposed to hold aloof and await further developments in the situation. Occasional sales were noted, however, at 22c. per pound for spot oil, and at from 21c. to 21½c. per pound for arrival, New York basis, the total transactions reported being about 1,500 barrels, principally for late fall arrival. The Hankow market was reported as firm with the offerings light for shipment . Changes in silver, and Chinese exchange were generally unimportant. Nothing new was heard in regard to political conditions in China, the situation apparently still being generally unfavorable. At the close of the week prevailing quotations were:—Barrels, spot, 22c. per pound; September arrival, 21½c.; Oct.-Nov., 21c.; Dec.-Jan., 21c.; September shipment from the Pacific Coast, barrels, 21c.; tanks, 20c.

COCONUT.—A fair inquiry was noted for coconut oil on the Pacific Coast, but aside from this there was a lack of developments of interest. The market was apparently steady at the recent advance with the offerings light. Occasional sales were noted at 8¼c. per pound for Ceylon grade and Manila oil for prompt shipment from the coast, and some business was also reported to have been done for delivery over the last quarter of the year at 8⅜c. to 8½c. Owing to uncertainty in regard to future supplies of copra, and also because considerable oil has been sold ahead, producers on the Pacific Coast were not inclined to push matters. On the spot offerings were light, and the market was steady with occasional sales noted of moderate quantities at unchanged prices. Copra was quiet on the coast, but offerings were limited, and the market remained steady. Quotations prevailing at the close of the week were as follows:—Ceylon, grade, spot, barrels, 9½c. per pound; Coast, tanks, 8¼c. to 8½c.; Manila, spot, barrels, 9¼c. to 9½c.; tanks, Coast, 8¼c. to 8½c.

CORN.—Offerings of crude from producers continued light, output having been sold ahead, and the market was firmer. There was a good inquiry, but business was curtailed by the smallness of offerings. Sales were noted at from 9½c. to 10c. per pound in sellers' tank cars at point of production with

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 3; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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still higher prices quoted in some quarters. There was a good inquiry for refined and the market was firm.

LUMBANG OIL.—Advices from the Pacific Coast reported the market quiet with 9c. per pound a nominal figure. The local market continued bare of offerings.

OLIVE.—There was a lack of new developments of importance, the market remaining steady at recently prevailing quotations for both denatured and edible. There was a fair inquiry in a jobbing way and the market remained steady, with sales of denatured noted at $1.15 per gallon. Quotations on edible oil ranged from $1.65 per gallon upward, according to grade and quantity.

OLIVE FOOTS.—Consumers showed little disposition to anticipate to any extent, but in some quarters a fair demand was noted and the market remained steady with 8½c. per pound generally demanded for prime foots on spots, though it was said to be possible to shade this figure on large lots. Offerings for shipment were light.

PALM.—Demand was more active, owing to the further rise in tallow, but there were few sales of consequence reported, owing to the smallness of supplies on spot and a lack of offerings of importance for shipment from abroad. Occasional sales were reported of Niger oil, however, at 7¼c. to 7⅜c. per pound, and of Lagos at 7½c. Spot stocks of both Niger and Lagos appear to be unusually light. Palm kernel oil was in fair request; spot stocks have diminished, and the market was firmer at 8¾c. to 9c. per pound.

PERILLA.—The market was firmer, with a somewhat better inquiry, though consumers showed little inclination to purchase ahead to any extent. Supplies in some quarters have diminished and offerings for shipment from abroad continued light. Sales were reported at 14½c. to 14¾c. per pound.

PEANUT.—The tone of the market for domestic oil continued firm despite the reaction in cottonseed oil. Demand was quiet, but supplies of both crude and refined are small, and there was no increase in offerings. Some small lot business was reported to have been done in refined oil on spot at 16c. per pound. Oriental oil was steady, with the demand quiet and the offerings light.

RAPESEED.—The situation lacked new features of importance. Demand was generally limited to comparatively small quantities, but there was no increase in offerings and the market remained steady at 76c. to 78c. per gallon for refined.

SESAME.—The market was steady at 11½c. to 11¾c. per pound, with a fair inquiry in a jobbing way. Mail advices from Dairen stated that a shipment of 4,400 tons of sesame seed left there recently for Trieste, and that stocks held by banking interests in Mukden and Tiehlin, amounting to about 170 car loads, have been disposed of.

SOYA BEAN.—There was a fair inquiry and further sales of some eight tanks of crude were reported for nearby arrival at 8¾c. to 9c. per pound Pacific Coast and 9¼c. to 9½c. per pound New York basis. Spot stocks of both crude and refined oil appear to be small.

VEGETABLE TALLOW.—The market continued quiet, but according to mail advices from the Pacific Coast, trading in new crop product is expected to commence next month.

Chicago

CHICAGO, Sept. 12, 1923.

COCONUT OIL.—The market is firm without being very active. The demand is moderate and mostly for single cars. There is little or no resale oil being offered right now at this market. Manila and domestic Ceylon oils are both offered at 8¼c., Coast, for September-October, with well known brands offered at that price. Manila oil might be had at a shade less, although for many users it is equivalent to the semi-refined oils mentioned. Domestic Ceylon oil is offered from Eastern ports at 9c. and 9¼c., car lots, in barrels, at Middle West points. The refiners are quoting their product at 11c. to 11¼c. in car lots, barrels, and at 11½c. to 11¾c. for smaller deliveries.

CHINA WOOD OIL.—There is no great demand, and prices are unchanged at present, Coast importers still submitting offers of 21c. for tank car lots, September-October position.

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Local stocks are to be had in required amounts at 24c. in barrels.

CORN OIL.—An active demand has developed from users who would under right conditions as to price use the cottonseed product. Sales have been made during the last two days at prices beginning at 9¾c., with sales today at 10¼c., and an advance of ¼c. asked by producers. All prices mentioned are at the mills. Some of the larger buyers have refused to buy, claiming that the present prices are too high. Refined edible oil is offered at 10¾c. in car lots and at 11c. to 11¼c. for l.c.l. orders.

PALM OIL.—There has been some inquiry but little trading here, although some offerings have been made of supplies from New York. Inquiries seemed to indicate that the sentiment of the users was against purchase, as they found last season that the results were too uncertain. Lagos is offered at around 7¼c. New York in usual orders.

PEANUT OIL.—Owing to the light supply and the small demand there is practically no market here for this oil. The former quotations are being made of 13c. for Southern domestic oil and 11½c. Coast for Oriental oil, though the latter must be entirely nominal, as the transportation conditions are largely upset by the necessities of the Japanese disaster.

SOYA BEAN OIL.—The market is nominal until conditions on the Coast are better understood. It is reported that there has been a general advance on the Coast of at least 2c., but this has not been confirmed by offers at any price. This would apply more, it is understood, to future deliveries, although it should have a tendency to advance prices for spot oil. The latest quotations were 8¾c. for sellers' tanks, Coast, or 9½c., Chicago. Stocks of resale oil are still offered at 9c., Chicago, in car lots, and at 10c. for smaller lots in barrels.

Seattle

SEATTLE, Wash., Sept. 8, 1923.

CHINA WOOD OIL.—Trading on this offering was at a standstill during the past week, as Oriental conditions worked effectively to prevent any commercial cables coming through and buyers showed a general inclination to hold back until such time as there is some order brought out of the present chaos. At the same time holders of spot lots all registered firmer ideas as to the value of their product, since they figure that shipping will be less than normal for some time to come, and that there will be a demand for current offerings. The close was up about a cent, with spot in sellers' tanks held at 24c. to 24½c., and cooperage at 27c., while c.i.f. lots were at the last price of 19½c. to 20c.

TEA OIL.—The practical absence of spot offering, and uncertainty on Oriental conditions, left this item unchanged at 11c. for a nominal figure on spot lots in sellers' tanks.

COCONUT OIL.—No trading was reported on this offering for the week, but the uncertainty as to the future movement from the Orient gave a decidedly firmer undertone to the spot market, and any holders of this oil had stronger ideas of its value. The fact that nothing was heard from producers prevented any operating in futures, although it is figured that this will be the least affected of all oils by the Japanese disaster, since there are such a large number of producing points for the raw material. The week closed with spot in sellers' tanks at 8¼c.

SESAME OIL.—A lack of definite information worked against any change on this oil, but strongly held prices were seen at the closing and firm bids would be almost certain to force a raise in prices. The final prices were 8¾c. to 9c. in sellers' tanks for spot delivery, and 10½c. for cooperage, while c.i.f. items ruled at 9¾c.

SOYA BEAN OIL.—The assurance that the earthquake damages would very materially affect future deliveries of this oil, including some large lots already contracted for, gave an air of great uncertainty to the present situation, and both buyers and sellers were afraid to take the first step in sounding out the actual situation. No data as to the actual damage has been secured, and until this is known the situation is expected to rule pretty much as at present. However, trade ideas all favor higher prices, based partly on the fact that the domestic markets on fats have already shown an upward swing. Nine cents was the held price most generally favored for sellers' tanks, spot delivery, at the closing, while cooperage was a quarter higher at 11c. The last c.i.f. figure received here was 7½c. to 7¾c.

PEANUT OIL.—This was another offering to register a firmness in sympathy with the higher domestic markets, and final ideas as to the value of this oil were a half to three-quarters of a cent above those seen for the end of the previous week. First trading is expected to develop even more changes. The closing showed spot in sellers' tanks offering at 11½c. to 12c., and cooperage at 13c., while c.i.f. lots were last reported at 7¾c. to 8c.

PERILLA OIL.—A lack of interest and primary market information left this offering unchanged here this week at 13¼c. to 13½c. on spot, sellers' tanks; 15½c. for spot, cooperage, and 14c. for c.i.f. items.

RAPESEED OIL.—Lack of information threw this offering even further in the doldrums, and the closing could be said to have been practically nominal at 13¼c. to 13½c. for spot lots in sellers' tanks, and 15½c. for cooperage, while c.i.f. lots ruled at 14½c.

HEMPSEED OIL.—Entirely ignored by both buyers and sellers, this item closed the week with a nominal asked price of 12c. for c.i.f. lots, covering the last advices received here.

San Francisco

SAN FRANCISCO, Sept. 8, 1923.

The vegetable oil market for the past week has been quiet, but steady. Some concern was felt as to the probable result of the Japanese disaster on the market, but at present writing it would appear that this would have no marked effect. There are a few mills located in Japan close to the scene of the disaster, but this should not affect the market in general. Sterling exchange has dropped again, to $4.52, but this is not sufficient yet to place British oils on a competitive basis.

COCONUT OIL.—A few tank cars sold at 8¼c. earlier in the week, and later bids of 8c. were made without any business being closed. Sellers' ideas are 8¼c. or higher, but buyers are not disposed to close at this limit, expecting lower prices, when the cottonseed crop is crushed. Sellers, on the other hand, maintain that lower prices cannot be expected on coconut oil because of the strong position of copra. It is difficult to gauge which of these factors will govern. No marked fluctuation is expected in coconut oil for some little time. Manila oil is strong at 8c. c.i.f. in bulk, Pacific Coast. Intermittent inquiries continue to come in from Mexico, but there is difficulty in satisfactorily financing these shipments, as many of the buyers insist upon terms of payment which sellers generally are not willing to concede.

SOYA BEAN OIL.—The major portion of distressed stocks held in this country appear to have been cleaned up, and while an occasional tank car might still be available on the basis of 8¾c. f.o.b. Pacific Coast, the market on future deliveries is generally recognized as being around 9¼c. in tank cars, duty paid. A little interest was shown in bulk shipments, buyers' ideas being 6¼c. c.i.f. Pacific Coast, but the Orient is stronger and it is questionable whether 6½c. c.i.f could be arranged at present. Barreled oil is selling locally at 10c. and 10½c. Lower prices in linseed oil have had a depressing effect on bean oil.

CHINAWOOD OIL.—The market appears to be weaker in some quarters, and it is reported that one prominent Japanese operator is offering tank cars for delivery over the end of the year down to 19¼c., in tank cars, Pacific Coast. Only limited quantities were available at this limit, and with most of the other prominent operators holding for 20½c. it is difficult to gauge what the future trend might be. It is certain, however, that prices are lower than previously, and with this tendency manifesting itself, buyers are inclined to postpone purchases lest the market goes still lower, which is not improbable in view of the present inflated values. On the other hand, available supplies in China appear to be limited, and the general situation there is still far from normal. The Japanese disaster will further complicate matters and should have a steadying effect on the wood oil market. Small lots are selling locally at 21½c., but trading is still very limited.

PERILLA OIL.—Small barreled lots on the local market have been cleaned up at prices around 14½c. per pound, which is more in line with present quotations from Japan. At present prices perilla oil can only be used for special purposes, as it is quite out of line with linseed oil.

RAPESEED OIL.—No business passing, price nominally 83c. per gallon, duty paid Pacific Coast.

VEGETABLE TALLOW.—It is anticipated that trading in new crop tallow will commence next month.

LUMBANG OIL.—No business passing, price nominally 9c. per pound.

Copra

There was apparently no improvement in the demand for copra, but the prevailing tone of the markets here and on the Pacific Coast continued firm, with the offerings light. Reports were current of sales at slightly above 5c. per pound, Pacific Coast basis, but the quantity involved was unimportant. There was an absence of new developments in primary markets.

San Francisco

SAN FRANCISCO, Sept. 8, 1923.

The copra market has been quiet during the past week and little activity has been reported. Prices remain about the same, though buyers' ideas are slightly lower, and today the best offer obtainable is 4⅝c. for fair merchantable Manila grade, but for the sun dried grades probably an eighth more could be obtained.

Seattle

SEATTLE, Wash., Sept. 8, 1923.

With the uncertainty as to future deliveries on other Oriental fat oils, coconut oil naturally came in for more interest during the past week, and this was in a measure reflected on the copra market. Portland has about the largest holdings of any Coast port now, and the dealers there reported an active enough inquiry to bring a boost of one cent in the held prices, which was at once reflected here. The closing showed c.i.f. lots offering at 5c. to 5¼c.

Fatty Acids

A good inquiry continued to be noted in some quarters for red oil and stearic acid, and the market retained the same firm tone that has characterized it for some time past. There were no new developments in other products. Supplies of vegetable fatty acids are small, with quotations nominal.

RED OIL.—A firm tone prevailed, and prices were maintained at former levels, both distilled and saponified being quoted at 9¾c. per pound in carload lots, f.o.b. factory, cooperage basis; tank cars, ¾c. per pound less than cooperage prices. Demand continued good.

STEARIC ACID.—The market retained a firm tone owing to the strength of raw material. There was no change in prices, however, double pressed being maintained at 13¾c. per pound and triple pressed at 14½c., f.o.b. factory, in carload lots. There was a good inquiry.

Chicago

CHICAGO, Sept. 12, 1923.

The demand for fatty acids is much more active and prices are higher for a number of products such as stearic acid and red oil and the corn and cottonseed products. The advance in oils and fats is being felt in most lines. Stocks are generally light and small orders for stearic acid are causing a good deal of trouble to those receiving them, as the local supply of this acid is practically nil. Corn oil fatty acid, tank cars, Chicago, has been advanced to 10c. Cottonseed fatty acids are in light supply. For the double distilled grade, 9c. to 9½c. is asked, an advance of practically 1c. Boildown soap is nominal at 4¾c. and settled soap at 4½c., both Texas points in car lots. Foots are quoted at 2c. to 2½c., Texas, but doubt is expressed if they could be had. Coconut fatty acids are only quoted in the second grade at 7¼c. to 7½c., Chicago. Acidulated coconut oil is offered at 7c. in tank cars, Chicago. Animal fatty acids, which have been very dull, are now moving to a considerable extent and prices are higher, say 8c. to 8½c. Stearic acid is hard to get and shipments are sold for arrival. In ton lots the price of the double pressed is 12½c. to 13c. and the triple pressed at 14c. to 15c.

RED OIL.—For red oil a good demand has developed recently and the market is firm, the advance in the price of fats and greases advancing the cost to producers. Single pressed is offered at 8½c. to 9c., double pressed at 9½c. to 10c. in round lots at warehouse and car lots at 8¼c. to 8½c. production points.

(Continued on page 49)

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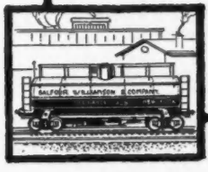

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Petroleum and Its Products

Once More Production Breaks All Records—Let-up in the Cutting of Gasoline Tank Wagon Prices—Stocks Increasing

It is not expected that the petroleum industry can bring about in a short space of time all the changes necessary because of changed conditions. In the one matter of adjusting crude prices to meet the pressure of over-production haste is being made very slowly. The delay in action by the company that is the leading buyer in the Midcontinent field has been the subject of endless gossip within and without the industry, and the reductions made in the prices of Louisiana and Arkansas crudes last week only brought them down to the level at which they were selling at this time last year. There exists an over-supply of both crude oil and gasoline, but the reductions made in gasoline prices have been much more radical than those made in crude oils. This, of course, operates to the disadvantage of the refiner, and particularly to any refining company that is neither a producer nor a distributor

When the radical cuts in gasoline prices were first made there was a disposition to consider them as only temporary, and to take the position that there was no use attempting to make readjustments based on them, as the price of gasoline would soon advance. It has not done so, however, and with the season of decreasing consumption at hand, low-priced gasoline between now and next spring is coming to be looked upon as a certainty, and it looks as if this fact would have to be given more consideration in the fixing of prices for crude oil and in other ways.

It had been hoped that by this time a decreasing production of crude would begin to add a certain amount of strength to the market, but the prophets have again been wrong—as usual—and the industry has come to believe that even the seventh son of a seventh son born with a cowl and a double veil could not tell when the peak of production is really going to be reached. In a recent interview one of the oldest and most experienced men in the oil industry ventured the opinion that fifty years from now this country would be producing more crude oil than it is today, and there is a lessening belief in any material decrease in production in the near future.

Daily average production for the week ended September 8 was the greatest on record. At a time when it had been predicted that there would be a decrease all records are going by the board. The increase at the present time is not coming from California. With the shutting in of a large amount of production on the Pacific Coast, the California figures have varied little for some weeks. Just now the increase comes from Central Texas and Wyoming, and in Wyoming there would be a much greater yield if wells were allowed to produce to capacity. At the present time the production of Central Texas is increasing so fast that many predict that it will not be long before Texas passes Oklahoma and becomes the second largest oil-producing State in the Union.

Average production per diem for the week ended September 8 was 2,280,700 barrels, an increase of 776,300 barrels a day over the same week of last year or more than 51 per cent. It was not possible for consumption to increase over 50 per cent in a year's time, and it was not possible for anyone to foresee that such an increase in output was going to occur. If 776,300 barrels a day had been added to the production of the world outside of the United States, instead of to the domestic production, the petroleum industry would have been called upon to undergo a reorganization compared to which the one it is now undergoing would be as nothing. The more production figures are considered the more evident it becomes that the outstanding feature of the situation is not that the market has been more or less demoralized, but that the situation has been met as well as it has.

Last week was not a period of tank-wagon reductions. In point of fact there has been so much cutting of gasoline prices that they are out of line not only with the cost of crude to most refiners, but also with the prices of other refinery products. Up to the present time the consumer of gasoline has received much greater benefit from the over-production of crude than have consumers of other products of the refinery. The explanation that this is logical because of the fact that there has been an over-production of gasoline does not alter the fact that it is not to be expected that the market should be so shaped that in the end the automobile owner should receive any greater proportionate benefits than the consumer of fuel oil or kerosene. Bunker oil in New York cost 65 cents a barrel more than it did at the crest of the import movement of Mexican oil, and recently there has been an effort on the part of refiners to advance kerosene prices.

Export demand recently has been somewhat disappointing, and the petroleum industry is most vitally interested in the negotiations now in progress between France and Germany. If Germany sees fit to end the effort to evade payment of its debts and settles down to make the money with which to meet its obligations, there will be a great improvement in foreign demand for refined petroleum products. American crude is now being refined in Mexico and the Dutch East Indies—both of which countries had been looked upon as dangerous rivals of American producers—and never before was this country in such splendid shape to dominate the oil business of the world as it is today. It might be mentioned that the wildcatting of American companies in foreign lands, commenced on such an active scale at the time when the talk was of decreasing domestic production, has not amounted to anything important up to this time, and that if the money spent had been put into development work at home the production of this country would be even greater than it is today.

Crude Oil

Early in the week a reduction of 20 cents a barrel on all grades of North Louisiana and Arkansas crudes except Smackover light and Bellevue, which were cut 10 cents, and Smackover heavy which was not changed. This brought these prices down to the level of this time last year. All the other buyers in the Midcontinent field having reduced their prices except the company that is the largest buyer, and which usually dominates prices in these fields, a reduction here has been looked for for weeks, during which time the company has been constantly reducing the amount of oil it would take. However, even on a basis of from $1.80 to 50c. a barrel Midcontinent oil is not particularly cheap, when it is considered that a year ago Midcontinent was not sold on a gravity basis and the flat price was $1.25 a barrel, while at this time two years ago it was $1 a barrel for oil of all gravities. Crude oil prices are not in line with gasoline prices, and until they are there will be little surprise at further reductions in crude.

With production breaking all records stocks continue to increase, and no one can guess how large they are going to be before they begin to come down. Little has been accomplished in the way of holding down production, but there has been a good deal of curtailment. It was announced last week that operators in the Salt Creek field have agreed to limit the output of wells to 65 per cent. of producing capacity. The production of Wyoming and Montana has increased over 100 per cent. during the last year, and it is getting very difficult to take care of the stocks which have accumulated.

The movement of California oil to the Eastern coast continues to increase steadily, and this increase promises to keep up indefinitely as more ships are put into the service. The total receipts of California oil at Atlantic and Gulf ports for August amounted to 6,564,000 barrels, an increase of 1,191,000 barrels over the receipts for July. There were over 3,000,000 barrels received at the port of New York alone during the month. The imports of Mexican oil at At-

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 3; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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lantic and Gulf ports during the month amounted to 7,736,000 barrels. During August of last year imports amounted to 9,795,221 barrels, but, of course, there was no movement of California oil, so that during August of this year the refineries of the Eastern seaboard received by water more than 4,500,000 barrels of oil more than during the same month of last year. The effect of this use of Pacific Coast oil in the East upon the whole crude oil situation cannot be overestimated.

According to the American Petroleum Institute analysis of the complete official petroleum statistics for July there was an excess of domestic production and imports over indicated domestic consumption and exports for the month of 11,753,551 barrels, or at an annual rate of 138,388,655 barrels. During the same month of last year there was an increase in stocks of 5,087,617 barrels. For the last twelve months stocks of crude have been piling up rapidly, and this promises to continue for a long time to come. The increase is certainly not because of the fact that the refineries are not sending enough oil to the stills, for the excess of domestic production over indicated domestic consumption of petroleum and liquid products for July was greater than the increase in crude stocks, being 14,549,155 barrels.

There has been a great deal of hesitancy manifested about cutting crude oil prices all this year. They were advanced at a time when there was no possible excuse for an advance, and high priced crude is one reason for the over-production. For this reason further price reductions would not be a surprise, and many well posted people in the industry think that they are inevitable.

Production

All records were broken by the production for the week ended September 8. The daily average production was estimated by the American Petroleum Institute as 2,280,700 barrels, an increase of 18,900 barrels over the previous week and of 757,400 barrels over the same week of 1922, and it might be mentioned that the production for the week ended September 9, 1922, broke all records up to that time. Production at the present time is running a little more than 1,000,000 barrels a day over what it was at this time two years ago.

The daily average production east of the Rocky Mountains for the week was 1,417,700 barrels, as compared with 1,391,800 barrels for the previous week. Wyoming and Montana increased 20,350 barrels over the previous week, and Central Texas 11,900 barrels.

The following are estimates of daily average gross production for the weeks ended September 8, September 1, 1923, and September 9, 1922:—

	1923		1922.
	Sept. 8.	Sept. 1.	Sept. 9.
Oklahoma	436,600	438,800	402,700
Kansas	74,700	75,150	86,550
North Texas	68,200	68,900	52,400
Central Texas	273,450	261,550	147,600
North Louisiana	59,050	61,650	95,900
Arkansas	127,300	126,600	31,500
Gulf Coast	103,400	102,500	106,900
Eastern	108,000	110,000	113,000
Wyoming and Montana	167,000	146,650	82,850
California	363,000	870,000	385,000
Totals	2,280,700	2,261,800	1,504,400

Santa Fe Springs is reported at 335,000 barrels, no change; Long Beach 219,000 barrels, against 225,000 barrels, and Huntington Beach 100,000 barrels, against 101,000 barrels. In Oklahoma, production of Burbank is shown as 101,600 barrels, against 102,100 barrels; Tonkawa, 73,200 barrels, against 76,250 barrels; and output of the Bristow pool was 60,300 barrels, against 60,600 barrels. The Mexia pool, Central Texas, is reported at 46,000 barrels, against 47,600 barrels; Haynesville, North Louisiana, 25,100 barrels, against 26,000 barrels, and Smackover, Arkansas, light, 12,100 barrels, against 13,150 barrels; heavy, 91,650 barrels, against 89,800 barrels. In the Gulf Coast field, Hull is reported at 21,950 barrels, against 21,100 barrels, and West Columbia, 14,300 barrels, against 14,100 barrels.

Imports

According to figures collected by the American Petroleum Institute, imports of petroleum (crude and refined oils) at the principal ports for the month of August totaled 7,736,000 barrels, a daily average of 249,548 barrels, compared with 8,105,000 barrels, a daily average of 261,451 barrels for the month of July. Imports at the principal United States ports for the week ended September 8 totaled 1,753,000 barrels, a daily average of 250,429 barrels, compared with 1,923,000 barrels, a daily average of 274,714 barrels for the week ended September 1. Details follow:—

	Month of—		Week ended
	August.	July.	Sept. 8.
At Atlantic Coast ports—			
Baltimore	430,000	390,000	43,000
Boston	395,000	530,000	110,000
New York	1,659,000	2,258,000	564,000
Philadelphia	456,000	405,000	110,000
Others	878,000	*947,000	111,000
Totals	3,818,000	4,530,000	938,000
Daily average	123,161	146,129	134,000
At Gulf Coast points—			
Galveston dist.	1,499,000	1,533,000	364,000
New Orleans and Baton Rouge	1,179,000	1,193,000	200,000
Port Arthur and Sabine district	1,038,000	757,000	199,000
Tampa	202,000	92,000	52,000
Totals	3,918,000	3,575,000	815,000
Daily average	126,387	115,322	116,429
At all U.S. ports—			
Totals	7,736,000	8,105,000	1,753,000
Daily average	249,548	261,451	250,429

Movement of California Oil

Receipts of California oil (crude and refined) at the principal Atlantic and Gulf Coast ports for the month of August totaled 6,564,000 barrels, a daily average of 211,741 barrels, compared with 5,373,000 barrels, a daily average of 173,322 barrels for the month of July. Receipts at Atlantic and Gulf Coast ports for the week ended September 8 totaled 752,000 barrels, a daily average of 107,429 barrels, against 440,000 barrels, a daily average of 62,857 barrels for the week ended September 1. Details follow:—

	Month of—		Week ended
	August.	July.	Sept. 8.
At Atlantic Coast ports—			
Baltimore	514,000	453,000	225,000
Boston	229,000	75,000	77,000
New York	3,049,000	*2,790,000	179,000
Philadelphia	987,000	666,000	73,000
Others	675,000	*775,000	70,000
Totals	5,454,000	4,759,000	624,000
Daily average	175,935	153,516	89,143
At Gulf Coast ports—			
New Orleans and Baton Rouge	140,000	614,000	128,000
Port Arthur and Sabine district	970,000	.....	.....
Totals	1,110,000	614,000	128,000
Daily average	35,806	19,806	18,286
Total, Atlantic and Gulf Coast ports	6,564,000	5,373,000	752,000
Daily average	211,741	173,322	107,429

Price Changes This Year

January 3.—Smackover put on gravity basis of 75c. a barrel of over 26 per cent. and 36c. under 26 per cent.

January 6.—California, except 14 to 19.9 per cent., reduced from 1c. on 20 to 20.9 deg. to 50c. on over 35 deg.

January 13.—Midcontinent advanced 10c. a barrel.

January 15.—Lima, Illinois, Indiana, Plymouth, Princeton and Waterloo advanced 10c. a barrel. Big Muddy, Cat Creek, Elk Basin, Grass Creek, Grey Bull, Mule Creek, Rock Creek advanced 10c. a barrel. Sunburst advanced 10c. to 30c., placed on gravity basis. Canadian crude advanced 10c.

January 16.—Corning advanced 25c. a barrel. Pennsylvania advanced 10c., Cabell 10c., Somerset 10c.

January 17.—Midcontinent advanced 10c. a barrel. North and Central Texas advanced 10c. a barrel.

January 18.—Lima, Indiana, Wooster, Illinois, Princeton, Plymouth and Waterloo advanced 10c. a barrel. Grass Creek, Elk Basin, Lance Creek, Big Muddy, Mule Creek and Rock Creek advanced 10c. a barrel. Pennsylvania, Cabell, Somerset light and Somerset heavy advanced 10c. a barrel. Bellevue, Bull Bayou, Caddo, Crichton, De Soto, Haynesville, El Dorado, Homer and Smackover advanced 10c. a barrel. Ferris, Grey Bull, Hamilton Dome, Lander, Lost Soldier, Osage, Pilot Butte, Salt Creek and Sunburst advanced 10c. All Louisina and Arkansas oils advanced 10c. a barrel.

January 23.—De Soto advanced 10c. a barrel; Bull Bayou, 10c.; Currie, 40c.; Mexia, 25c.

January 26.—Louisiana and Arkansas crude advanced 10c. a barrel.

January 27.—Kansas, Oklahoma and North Texas crude advanced 10c. a barrel.

January 29.—Pennsylvania, Cabell, Somerset light and Somerset heavy advanced 10c. a barrel. Wyoming crude advanced 10c. a barrel.

January 30.—Corning advanced 15c. a barrel.

January 31.—Caddo, De Soto, Bull Bayou and Crichton advanced 10c. a barrel. Lima, Indiana, Illinois, Wooster, Princeton, Plymouth and Waterloo advanced 10c. a barrel. Canadian oil advanced 10c. a barrel.

February 1.—Pennsylvania advanced 25c. a barrel. Cabell, Somerset light and Somerset heavy advanced 10c. a barrel.

February 2.—Midcontinent advanced 10c. a barrel; Mexia, Currie, Bull Bayou, Crichton and De Soto advanced 2c.

February 3.—Pennsylvania advanced 10c.; all Wyoming and Montana crudes advanced 10c.

February 5.—Lima, Indiana, Wooster, Illinois, Princeton, Plymouth and Waterloo advanced 10c. a barrel; Canadian crude advanced 10c.; North and Central Texas high grade advanced 10c.

February 8.—Pennsylvania advanced 10c.; Cabell up 8c.; Somerset light advanced 10c.; Gulf Coast oil advanced 25c. a barrel.

February 10.—Midcontinent advanced 10c. a barrel.

February 13.—Montana and Wyoming crude advanced 10c. a barrel; Lima, Wooster, Indiana, Illinois, Princeton, Plymouth and Waterloo advanced 10c. a barrel; North and Central Texas, Currie, Mexia, Caddo, Bull Bayou, De Soto and Crichton advanced 10c. a barrel; Canadian crudes advanced 10c. a barrel; North Louisian and Arkansas crude advanced 10c. a barrel.

February 14.—Corsicana light and heavy and Thrall advanced 15c. a barrel.

February 15.—Pennsylvania up 25c. a barrel; Ragland advanced 10c. a barrel; Somerset light, Cabell and Corning advanced 15c. a barrel.

February 17.—Midcontinent advanced 10c. a barrel; Mexia Currie, all grades of Caddo, De Soto, Bull Bayou, Crichton and Smackover advanced 10c. a barrel.

February 19.—Canadian crude advanced 10c. a barrel; Lima, Indiana, Wooster, Illinois, Princeton, Plymouth and Waterloo advanced 10c. a barrel; Wyoming and Montana crudes advanced 10c. a barrel; Haynesville, Homer and Bellevue advanced 10c. a barrel.

March 15.—Gulf Coast crude advanced 25c. a barrel.

March 28.—Smackover heavy reduced 10c. a barrel.

April 5.—Currie, 41 gravity and above, reduced 20c. a barrel; Mexia reduced 20c. a barrel.

April 10.—Los Angeles and Orange county, California, crude reduced from 1c. a barrel on 20-degree gravity to 41c. on 35 degrees and above.

April 11.—Pennsylvania crude reduced 25c. a barrel; Corning reduced 15c. a barrel; Somerset and Somerset light reduced 35c. a barrel; Cabell reduced 35c. a barrel.

April 12.—Lima, Indiana, Illinois, Princeton, Plymouth, Waterloo and Canadian crude reduced 10c. a barrel.

April 13.—Smackover crude reduced 10c. a barrel.

April 16.—Sunburst, Mont., crude reduced by eliminating gravity basis and putting all grades at $1.30. Range has been $1.30 to $1.50.

April 20.—Bellevue crude reduced 20c. a barrel.

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Once the world was thrilled only to the magic word "Gold." Gold of the Indies—of the Americas. Fabulous tales of heavenly cities with streets of solid gold sent Columbus across the Atlantic, Cortez into Mexico, Pizarro into Peru and Albuquerque into what is now Arizona.

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April 23.—Midcontinent and Texas crude reduced 10c. a barrel.
April 24.—All grades of Louisiana and Arkansas crudes reduced 10c. a barrel; Healdton reduced 10c.; Grass Creek reduced 25c.; Lima, Indiana, Illinois, Princeton, Plymouth and Waterloo reduced 10c.; Wooster reduced 25c.; Cabell, 25c.; Lima, Indiana, Illinois, Plymouth, Waterloo and Wooster reduced 10c. a barrel; Corning reduced 15c.; Somerset and Somerset light reduced 20c.; Ragland reduced 10c.; all Louisiana and Arkansas crudes reduced 10c. a barrel; North and Central Texas reduced 10c. a barrel; Mexia and Currie reduced 10c. a barrel; all grades of Wyoming and Montana except Sunburst oil reduced 10c. a barrel.
June 18.—Pennsylvania crude reduced 25c. a barrel; Corning reduced 15c.; Cabell, 20c.; Somerset, 20c.; Somerset light, 25c., and Ragland, 10c. a barrel.
June 19.—Wooster reduced 15c. a barrel.
June 25.—Corsicana light reduced 25c. a barrel; Corsicana heavy reduced 5c.; Mexia reduced 10c. a barrel.
June 28.—Lima, Illinois, Indiana, Plymouth, Priceton and Waterloo reduced 10c. a barrel.
June 29.—Mexia reduced 25c.; Corsicana light reduced 10c.; Corsicana reduced 5c.; Canadian reduced 10c
July 5.—Gulf Coast reduced 25c.; Mexia reduced 25c.; Currie reduced 35c., and Corsicana light, 15c.
July 10.—Pennsylvania reduced 25c. a barrel; Cabell, 21c.; Somerset light, 15c.; Somerset medium, 20c.; Ragland, 15c.
July 11.—Corning reduced 10c. a barrel.
July 17.—Wooster reduced 10c. a barrel.
July 19.—Lima, Indiana, Illinois, Princeton, Plymouth and Waterloo reduced 20c. a barrel; Wooster reduced 10c.
July 26.—Gulf Coast crude reduced 25c. a barrel; Pierce Junction reduced 15c.
August 1.—San Joaquin Valley crude reduced from 1c. to 41c. a barrel, according to grade.
August 4.—Caddo, Haynesville, El Dorado and Homer reduced and gravity basis changed. Reductions running from 15c. to 65c. a barrel. Bull Bayou reduced 25c. a barrel.
August 10.—Big Muddy reduced 15c. a barrel.
August 20.—Gulf Coast crude reduced 25c. a barrel on Grade A.
September 1.—Midcontinent reduced 10c. to 40c. a barrel by some buyers.
September 10.—Louisiana and Arkansas crudes reduced from 10c. to 20c. a barrel.

Prices at Wells

The following prices are those paid by the pipelines for crude as delivered from the wells, with a comparison for the corresponding period of 1922:

Pennsylvania-Ohio-West Virginia

	Per bbl. 1923.	1922.
Cabell, W. Va.	$1.71	$1.86
Corning, Ohio	1.60	1.75
Lima	1.88	1.98
Pennsylvania	2.75@3.00	3.00
Wooster, Ohio	1.70	2.10

Indiana-Illinois

Illinois	1.67	1.77
Indiana	1.68	1.78
Plymouth, Ill.	1.05	1.15
Princeton, Ind.	1.67	1.77
Waterloo	1.15	1.25

Kentucky-Tennessee

Ragland	.75	1.00
Somerset, light, 38 gravity, and above	1.55	1.90
medium	1.40	1.65

Oklahoma-Kansas

Healdton	.90	.75
Midcontinent, below 28 deg. gravity	.50@1.10	1.25
28 deg. to and including 29.9 deg. gravity	.75@1.20	1.25
30 deg. to and including 32.9 deg. gravity	1.10@1.30	1.25
33 deg. to and including 34.9 deg. gravity	1.25@1.45	1.25
35 deg. to and including 36.9 deg. gravity	1.40@1.60	1.25
37.9 deg. to and including 38.9 deg. gravity	1.60@1.80	1.25
39 deg. gravity and above	1.80@2.00	1.25
41 deg. and above	1.80@2.20	1.25
Walters and Beaver Creek	.65	.75

California

(All fields)

14 deg. to and including 19.9 deg. gravity	.60	.60
20 deg. to and including 20.9 deg. gravity	.61	.63
21 deg. to and including 21.9 deg. gravity	.62	.67
22 deg. to and including 22.9 deg. gravity	.65	.73
23 deg. to and including 23.9 deg. gravity	.68	.80
24 deg. to and including 24.9 deg. gravity	.71	.88
25 deg. to and including 25.9 deg. gravity	.74	.96
26 deg. to and including 26.9 deg. gravity	.77	1.05
27 deg. to and including 27.9 deg. gravity	.80	1.15
28 deg. to and including 28.9 deg. gravity	.83	1.25
29 deg. to and including 29.9 deg. gravity	.86	1.35
30 deg. to and including 30.9 deg. gravity	.89	1.45
31 deg. to and including 31.9 deg. gravity	.92	1.55
32 deg. to and including 32.9 deg. gravity	.95	1.65
33 deg. to and including 33.9 deg. gravity	.98	1.75
34 deg. to and including 34.9 deg. gravity	1.01	1.85
35 deg. gravity and above	1.04	1.95

Wyoming and Montana

Big Muddy	1.10	.70
Cat Creek	1.70	1.20
Elk Basin	1.60	1.20
Fe.vis	1.35	.85
Grass Creek	1.55	1.20
Greybull	1.60	1.20
Hamilton Dome	1.25	1.20
Kevin	.80	...
Lander	.80	.42
Lost Soldier	1.15	.85
Mule Creek	.95	.65
Osage	1.70	1.20
Pilot Butte	.80	.50
Rock Creek	1.23	.80
Salt Creek	1.25	.70
Sunburst	.70	...
Torchlight	1.70	1.50

Gulf Coast

Gulf Coast, Grade A	1.00	1.25
Gulf Coast, Grade B	1.00	1.25
Pierce Junction	.90	.80

Louisiana and Arkansas

Bellevue	.75	.75
Bull Bayou, 38 grav. and above	1.15	1.15
35 to 37.9 deg.	1.05	1.05
32 to 34.9 deg.	1.00	1.00
Caddo, 38 deg. and above	1.25	1.25
35 to 37.9 deg.	1.15	1.15
32 to 34.9 deg.	1.10	1.10
below 32 deg.	.75	.75
above	1.10	1.10
below 33 deg.	1.00	1.00
El Dorado, 33 deg. and above	1.25	1.25
below 33 deg.	1.10	1.00
Homer, 35 deg. and above	1.25	1.25
33 to 34.9 deg.	1.15	1.15
31 to 32.9 deg.	1.10	1.10
below 31 deg.	.75	.75
Crichton	.90	1.00
De Soto	1.25	1.25
Pine Island	.75	.75
Smackover, 28 deg. and above	.75	..
25 to 25.9 deg.	.60	..
24 to 24.9 deg.	.50	..
below 24 deg.	.40	..

North and Central Texas

Burkburnett	1.40	1.50
Cement	1.00	1.10
Corsicana, light	1.00	1.10
heavy	.60	.55
Currie	1.00	...
Electra	1.40	1.50
Henrietta	1.40	1.50
Mexia	1.00	1.25
Moran	1.40	1.50
North Central Texas, 41 deg. and above	2.20	1.50
39 to 40.9 deg.	2.00	1.50
37 to 38.9 deg.	1.80	1.50
35 to 36.9 deg.	1.60	1.50
33 to 34.9 deg.	1.45	1.50
30 to 32.9 deg.	1.30	1.50
28 to 29.9 deg.	1.20	1.50
below 28 deg.	1.10	1.50
Petrolia	1.40	1.50
Ranger	1.40	1.50
Stephens	1.40	1.50
Strawn	1.40	1.50
Thrall	1.00	1.50

Canada

Oil Springs	2.35	2.45
Petrolia	2.28	2.38
(Add 2c. per barrel to each grade to include allowance by government to producers.)		

Mexico

F.o.b. terminals Mexican ports (based on contracts)—		
*Tuxpan, crude oil, bbl.	1.35	1.47
†Panuco, crude oil, bbl.	.75	.90

* Plus 26.75 cents tax.
† Plus 16.63 cents tax.

Refined Products

No strength developed in the gasoline market last week, but it began to look as if price cutting had gone as far as it could be expected to go—for the time being at least. There were no further reductions in tank wagon prices announced and refiners had already cut their prices more than is justified by existing crude prices. There is a general feeling among independent refiners that the situation existing is not discounted by the reductions already made in crude prices and that a further readjustment of the situation is in order. In spite of the problems with which refiners are confronted there has been no general move to curtail production, and as the time is now at hand when there will be a steady decrease in gasoline consumption for many months, stocks promise to become more unwieldy than they are at present. In spite of the fact that gasoline consumption this summer broke all records, there was not enough reduction in the surplus stocks to relieve the market to any extent. The refiners of this country at the present time can produce a good deal more of all their products than there is a demand for, and the rapid increase in the refinery capacity of the Pacific Coast promises to further accentuate this condition of affairs.

According to the analysis of the American Petroleum Institute exports of all petroleum to foreign countries and to non-contiguous territories of the United States during July amounted to 8,407,515 barrels as compared with 9,766,156 barrels during the previous month, and the indicated domestic consumption of petroleum and liquid products was 50,697,845 barrels as compared with 43,796,303 barrels in June. The excess of domestic production over indicated domestic consumption was 14,549,155 barrels in July as compared with 17,694,697 barrels in June. The fact that the July excess was not as great as that of June was largely due to the increase in the consumption of gasoline, but the time is now at hand when gasoline consumption will decrease instead of increase from month to month, and the situation is not what it should be. When last year an excess of 2,113,784 barrels was shown for the month of July it was considered large. Production of gasoline for July was placed at 15,164,573 barrels. The August figures will probably be as large. This is much more than can be consumed per month during the winter, and unless production is cut materially the amount of gasoline that will be in stock by next spring will be so large that it will be difficult for the industry—with all its resources—to take care of it.

There was no cut in fuel oil prices in the East during the week, and they have not yet reflected the softer feeling shown in some other sections. The settlement of the coal strike did not have any visible effect on the fuel oil market. In spite of the great field for expansion of consumption offered the fuel oil market, the indicated consumption of fuel and gas oils for July was not as great as for the same month of last year. Stocks are large, and California production is increasing very rapidly, in spite of the high gasoline contents of a large part of the Pacific Coast production.

Kerosene consumption has commenced to increase, and kerosene prices do not come down. Stocks, however, are not as large as they were at this time last year, and there are indications that there may be an improvement in the export demand. The indicated consumption of kerosene for July was considerably less than for the same month of last year.

The approach of cold weather has increased zero cold test oils, but there has been little change in the situation in the market for lubricants.

Gasoline and Naphtha

There was no great change in the situation in the gasoline market last week. The let-up in the cutting of tankwagon prices gave the market more stability, and refiners have certainly done about all the marking down that could be expected of them. In many sections, however, the position of the refiners is as bad as it ever was, and the one thing that can never be gotten away from is that too much gasoline has been accumulated in this country and coupled with this is the fact that the season of declining domestic consumption is at hand. It looks as if there was going to continue to be distressed gasoline seeking a market at any price as long as there is no material decrease in consumption. Prices in the Midcontinent field have been cut to the bone, but it does not seem possible for refiners there to produce as cheaply as those of the East who are running on California oil, and Louisiana refineries which are using California crude have an advantage over those which use Louisiana or Arkansas crude. The gasoline market is in such a shape that it is going to take a good deal of time to restore it to conditions which might be described as normal, and normal conditions today would not mean gasoline selling to consumers at an average price of say 25 cents a gallon. There will be more gasoline made during the next six months than can be marketed, and with such an accumulation on hand as there is at the present time it is difficult to imagine any change in conditions in the immediate future that would justify an increase in tankwagon prices.

Production of gasoline in July was 15,164,573 barrels, compared with 15,160,338 barrels in June and 13,564,557 barrels in July, 1922. Stocks July 31 were 27,747,365 barrels; June 30, 30,085,313 barrels; and July 31, 1922, 18,402,594 barrels. Exports in July were 1,993,359 barrels; in June, 1,793,214 barrels; and in July, 1922, 1,440,421 barrels. The indicated domestic consumption of gasoline in July was 15,509,162 barrels; in June, 14,913,555 barrels; and in July, 1922, 13,363,600 barrels.

Refinery Prices

Illinois-Indiana

50-52, 450 end point, naphtha	gal.	6¼@ 6¾
56-58, 450 end point	gal.	6¼@ 6¾
58-60, 437 end point (new navy)	gal.	6½@ 7
60-62, 400 end point	gal.	8½@ 8¾
64-66, 370 end point	gal.	9¾@ 10
68-70, 400 end point	gal.	11½@ 12
80-84 compression	gal.	6¾@ 7¼
72-76 absorption	gal.	7¼@ 7¾
60-62, 450 end point, blend	gal.	6¼@ 6¾
64-66, 450 end point, blend	gal.	6¼@ 6¾

North Texas

48-50, 450 end point, naphtha	gal.	6¼@ 6¾
50-52, 450 end point, naphtha	gal.	6½@ 7
56-58, 450 end point, naphtha	gal.	6½@ 6¾
58-60, 437 end point, 140 i.b.p. (new navy)	gal.	6¾@ 7
64-66, 330 end point, gasoline	gal.	9¼@ 9½
58-60 blend, 450 end point	gal.	9½@ 9¾
60-62 blend, 450 end point	gal.	8½@ 8¾
80-84, compression	gal.	6½@ 6¾
84-90, compression	gal.	6¾@ 6½
72-76, absorption	gal.	7 @ 7½

Oklahoma

48-50, 460 end point	gal.	6¼@ 6¾
50-52, 450 end point	gal.	6¼@ 6¾
56-58, 450 end point	gal.	6¼@ 6¾
56-58 (new navy), 437 end point, i.b.p. 140	gal.	6¼@ 6¾
58-60 (new navy), 437 end point, i.b.p. 140	gal.	6½@ 7
60-62, 440 end point	gal.	8¾@ 9
64-66, 375 end point	gal.	9¾@ 10
68-70, 350 end point	gal.	11½@ 12
Grade A, 72-76, under 375 end point	gal.	7 @ 7½
Grade B, 70-78, 375 e. p.	gal.	7 @ 7½
Grade C, 80-85, 375 e. p.	gal.	6¾@ 7¼
Grade D, 80-84, 330 e. p.	gal.	7 @ 7½
Grade 1, 60-62, 450 end point, i.b.p. 87	gal.	6¼@ 7
Grade 2, 62-66, 450 end point, i.b.p. 80	gal.	6¼@ 7
Grade 3, 66-70, 450 end point, i.b.p. 70	gal.	6¼@ 7

Pennsylvania

52 grav., naphtha	gal.	10¾@ 11
54 grav., naphtha	gal.	11½@ —
58 grav., S. R., gasoline	gal.	12 @ —
60 grav., S. R., gasoline	gal.	13 @ —
62 grav., S. R., gasoline	gal.	14 @ —
64 grav., S. R., gasoline	gal.	15 @ —
66 grav., S. R., gasoline	gal.	17 @ —
68 grav., S. R., gasoline	gal.	17½@ —
68-70 blend, 450 end point	gal.	11½@ —
60-62 blend, 450 end point	gal.	11½@ —
62-64 blend, 450 end point	gal.	11½@ —
66-68 blend, 440 end point	gal.	11½@ —
68-70 blend, 420 end point	gal.	11½@ —

North Louisiana-South Arkansas

51-53, 460 e. p., naphtha	gal.	6 @ 6¼
56-58, 450 end point	gal.	6¼@ 6¾
58-60, 437 end point	gal.	6½@ 7
64-66, 400 end point	gal.	7 @ 7½
80-88, compression	gal.	6¼@ 6½

Rocky Mountain States

56-60, 437 e. p. (new navy)	gal.	11 @ 11¼

For tankwagon and service station prices see page 79.

Kerosene

This is the season of the year when the demand for kerosene increases, but there has been no marked improvement in the demand as yet. No move has been made to mark tankwagon prices down, and consumers have heard so much of cheap gasoline that they are inclined to look for lower priced kerosene. The difference, of course, lies in the fact that kerosene production has been held down, and stocks have not been piled up, as have stocks of gasoline. Exports hold up fairly well, but the export demand is not active enough to be a source of strength to the market, and there is not the steady increase in domestic consumption that there is in gasoline. Kerosene is looked upon as the step-child of the petroleum market nowadays, and does not receive the consideration that it deserves, perhaps. The fact that California is not a large kerosene producer has been the fact that has enabled the market to hold as steady as it has. In California, only about 4 per cent of the products of the refineries is kerosene, as compared with 17 per cent, as shown by the refineries of Pennsylvania, New York, Ohio and West Virginia.

Production of kerosene in July was 4,451,577 barrels, compared with 4,263,661 barrels in June and 4,593,439 barrels in July, 1922. Stocks, July 31, were 6,415,710 barrels; June 30, 6,292,881 barrels, and July 31, 1922, 7,728,241 barrels. Exports in July were 1,424,310 barrels; in June, 1,541,758 barrels, and in July, 1922, 1,209,917 barrels. The indicated domestic consumption of kerosene in July was 2,934,438 barrels; in June, 2,921,219 barrels, and in July, 1922, 3,216,578 barrels.

Refinery Prices

Illinois-Indiana

41-42 water white kerosene	gal.	4 @ 4¼
42-43 water white kerosene	gal.	4¼@ 4½

North Texas

40-42 prime white distillate	gal.	3¼@ 3½
41-43 prime white kerosene	gal.	3½@ 3¾
41-43 water white kerosene	gal.	3¾@ 4

Oklahoma

41-43 water white kerosene	gal.	3¾@ 4
42-43 water white kerosene	gal.	4 @ 4¼
44-46 distillate	gal.	5 @ 5¼
45-47 distillate, 510 e. p.	gal.	6¼@ 7¼
46-48 distillate, 480 e. p.	gal.	7 @ 7¼

Pennsylvania

45 prime white	gal.	5½@ —
45 water white	gal.	5¾@ —
46 water white	gal.	6½@ —
47 water white	gal.	7½@ —
36 miners' neutral	gal.	6¾@ —

West Virginia

45 water white	gal.	5¾@ —
47 water white	gal.	7½@ —

North Louisiana-South Arkansas

41-43 prime white kerosene	gal.	3¾@ 4
42-43 water white kerosene	gal.	3¾@ 4½

Rocky Mountain States

41-43 water white kerosene	gal.	3¾@ 4

For tankwagon prices see page 79.

Fuel and Gas Oils

Fuel oil is accumulating on the hands of many refiners, especially in

Fuel and Gas Oils

There was no change in the fuel oil situation as a result of the settlement of the coal strike. The East has not yet turned to the use of fuel oil for heating purposes, as have some sections of the Central West, but it is making progress, and would move more rapidly if the cost was less. There has been no reduction in the price of bunker oil, which is still quoted at $1.60 a barrel, which is 15 cents a barrel higher than it was quoted at this time last year. About 46 per cent. of the output of the California refineries is fuel and gas oil, and it seems that California is in a position to eventually supply a much larger per cent. of what is used in the East than it is at present. The demand for gas oil is slow in all parts of the country, and large consumers would hardly make forward contracts at quoted prices. Stocks are very large, and there promises to be a continued increase until there is some radical change in the entire petroleum situation.

Production of gas and fuel oil in July was 25,077,203 barrels, compared with 23,115,949 barrels in June and 22,834,012 barrels in July, 1922. Stocks July 31 were 33,352,709 barrels; June 30, 31,524,407 barrels, and July 31, 1922, 32,354,054 barrels. Exports in July were 2,880,274 barrels; June, 2,914,095 barrels, and in July, 1922, 1,348,159 barrels. The indicated domestic consumption of gas and fuel oil in July was 20,368,627 barrels; in June, 18,359,880 barrels, and in July, 1922, 20,725,600 barrels.

Refinery Prices

Bayonne

Fusel oil	bbl.	1.60 @ —
Diesel oil	bbl.	1.78½@ —
Gas oil	gal.	4½@ —

Illinois-Indiana

22-24 fuel oil, Arkansas	bbl.	70 @ 80
24-26 fuel oil, sellers' cars	bbl.	85 @ 90
32-36 gas oil	gal.	2¾@ 2½
38-40 straw distillate		2¾@ 2¾
Road oil	bbl.	1.00 @ 1.10

Pennsylvania

36-40 fuel oil	gal.	5 @ —
30-34 fuel oil	gal.	4½@ 4¾

Oklahoma

32-36 gas oil	gal.	2¾@ 2¾
24-26 fuel oil	bbl.	90 @ 95
Fuel oil, buyers' cars	bbl.	85 @ 90
38-40 straw distillate		2¾@ 3

Kansas

24-26 fuel oil	bbl.	85 @ 90
32-36 gas oil	gal.	2½@ 2¾
36-38 distillate		2¾@ 3

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From '93 to '23

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PARAFFINE WAX
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Gibson's Point, Pa. Savannah, Ga. Jacksonville, Fla.
Port Tampa, Fla. Gretna, La. Galveston, Tex.
Magazine Point (Mobile), Ala. Port Arthur, Texas

North Texas

38-40 straw distillate	gal.	2½@	2¾
36-38 gas oil	gal.	2½@	2¾
32-36 gas oil	gal.	2¼@	2½
24-26 fuel oil	bbl.	85 @	90
26-30 fuel oil	bbl.	90 @	1.00

Gulf Coast (South Texas)

Gas oil	gal.	3½@	3¾
Fuel	bbl.	1.30 @	1.35

Louisiana-Arkansas

32-36 gas oil	gal.	2¾@	3
24-26 fuel	bbl.	85 @	90
38-40 light straw distillate		3 @	—

California

Fuel oil	bbl.	50 @	60
Diesel oil	gal.	2½@	3

Lubricating Oils

Pennsylvania refiners have been so much encouraged by the demand for lubricants that they have advanced some of their quotations a little. This may be in anticipation of the benefits they expect to derive from the campaign they are planning to prove to the world how superior are Pennsylvania made lubricants to those produced in other sections. There was not a great deal of change in the market during the week. Stocks are large, but they are no larger than they were a year ago, and this fact is in itself a proof that the market might be in far worse shape than it is. There are high hopes at the present time that conditions abroad may improve to an extent that will help the export demand, and exporters, last week, were showing more interest than they were a short time ago. There is just as active competition among jobbers as there ever was, and just as much talk of price shading when there is a chance of price shading meaning business. Domestic consumption is considerably larger than it was a year ago, and the outlook for a better than normal domestic consumption during the fall and winter is generally considered good.

Production of lubricating oil in July was 2,237,164 barrels, compared with 2,279,193 barrels in June and 2,183,690 barrels in July, 1922. Stocks, July 31, were 5,355,999 barrels; June 30, 5,360,410 barrels, and July 31, 1922, 5,397,399 barrels. Exports in July were 561,981 barrels; in June, 917,956 barrels, and in July, 1922, 677,342 barrels. The indicated domestic consumption of lubricating oil in July, 1,679,594 barrels; in June, 1,388,649 barrels, and in July, 1922, 1,511,421 barrels.

Refinery Prices

Pennsylvania

34 neut., 350-360 flash, 85-90 vis.		7¾@	—
36 neut., 300-305 flash, 60-65 vis.		6¼@	—
200 vis., No. 3 color	gal.	29½@	—
220 vis., No. 3 color	gal.	32 @	—
180 vis., No. 3 color	gal.	27½@	—
150 vis., No. 3 color	gal.	24 @	—
600 fire steam ref. cyl. stock	gal.	9½@	—
635 fire steam ref. cyl. stock	gal.	11½@	—
650 fire steam ref. cyl. stock	gal.	12½@	—
600 flash steam ref. cyl. stock	gal.	15½@	—
600 E amber filt. cyl. stock	gal.	13½@	—
600 D filt. cyl. stock	gal.	19½@	—
600 cold test (bright filt.)	gal.	34 @	—
600 cold test (dark filt.)	gal.	31 @	—

Oklahoma

70 vis., No. 2½ color	gal.	4¼@	4½
100 vis., No. 2 color	gal.	5¼@	5¾
100 vis., No. 2½ color	gal.	5 @	5¼
200 vis., No. 4 color	gal.	12¼@	12¾
200 vis., No. 5 color	gal.	11½@	12
240 vis., No. 4 color	gal.	14¼@	14¾
280 vis., No. 4 color	gal.	16¾@	17
280 vis., No. 5 color	gal.	14½@	15
300 vis., No. 5 color	gal.	14½@	15
600 bright filtered stock	gal.	31 @	—
600 light filtered stock	gal.	27 @	29
Black oil	gal.	5¼@	6½

South Texas

Zero black	gal.	6 @	7
100 vis., No. 2 color, unfilt.	gal.	6 @	7
150 vis., No. 2½ color, unfilt.	gal.	7 @	8
200 vis., No. 3 color, unfilt.	gal.	10½@	11½
300 vis., No. 3½ color, unfilt.	gal.	13½@	14½
500 vis., No. 3½ color, unfilt.	gal.	16½@	17½
750 vis., No. 4 color, unfilt.	gal.	24 @	25
100 vis., No. 1½ color, filt.	gal.	10 @	11½
150 vis., No. 1½ color, filt.	gal.	12 @	13
200 vis., No. 2 color, filt.	gal.	17¼@	18¼
300 vis., No. 2 color, filt.	gal.	18 @	19
600 vis., No. 2½ color, filt.	gal.	23½@	25
500 vis., No. 6 color	gal.	14½@	16
750 vis., No. 5½ color, filt.	gal.	24½@	25½
200 vis., No. 5½ color	gal.	11 @	12
300 vis., No. 5 color	gal.	11½@	12½

Waxes

This market continues steady, and prices are well maintained. There was no change of importance in the tone of the market last week. Export business was a little quiet but the routine demand for domestic consumption is good enough to indicate that the amount being used in this country at the present time is rather larger than normal. Prices held at the same level as during the previous week.

Quotations follow: — White crude scale, 122 to 124 A.m.p., 2⅞c. to 3c. a pound; 124 to 126 A.m.p., 2⅞c. to 3c.; yellow crude scale, 124 to 126 A.m.p., 2¾c. to 2⅞c.; match, 105 to 108 A.m.p., 4c.; 111 to 115 A.m.p., 3⅞c.; semi-refined 122 to 124 A.m.p., 3c. to 3⅛c.; 124 to 126 A.m.p., 3¼c.; fully refined, 118 to 120 A.m.p., 3¼c.; 125 to 127 A.m.p., 3⅞c.; 128 to 130 A.m.p., 4c.; 130 to 132 A.m.p., 4¾c.; 133 to 135 A.m.p., 5¼c.; 135 to 137 A.m.p., 5⅜c.; 136 to 140 A.m.p., 5½c.

Refinery Prices

Pennsylvania

122-124 white, crude, scale	2½@	2¾
124-126 white, crude, scale	2⅞@	3⅛

Oklahoma

122-124 white, crude, scale	2 @	2¼
124-126 white, crude, scale	2¼@	2½

Petrolatums

There was no change worthy of note in this market during the period. There is a fair routine domestic demand right along, but nothing that is more than normal for this season of the year. The domestic demand is better than that for export.

Quotations follow: — Snow white, 11½c. a pound; Lily white, 9¼c.; cream petroleum jelly 7c.; amber, 4½c.; dark amber, 3¼c.; veterinary, 3c. to 3½c.; dark green, 2c.

Pipeline Reports

New York, Pennsylvania, West Virginia, Kentucky, Tennessee, Ohio and Indiana:—

Runs

	Barrels.	Total.
September 4	58,575	72,255
September 5	75,331	147,586
September 6	30,225	177,711
September 7 and 8	89,365	265,076
September 9	88,190	353,266

Deliveries

	Barrels.	Total.
September 5	107,345	177,301
September 6	59,908	237,209
September 7	33,669	270,878
September 8 and 9	79,905	350,783
September 10	40,320	391,103

For Year by Months

	Runs.	Deliveries.
January	1,597,975	1,922,565
February	1,429,982	1,620,091
March	1,858,477	1,792,816
April	1,582,838	2,014,554
May	1,771,153	2,191,468
June	1,667,751	1,528,000
July	1,521,535	1,798,567
August	1,644,602	1,783,655

Tampa Oil Dealer Denies Gasoline Price Conspiracy

WASHINGTON, Sept. 12, 1923.

The Peninsular State Oil Co., Jacksonville, Fla., has filed its answer to the complaint issued against more than one hundred respondent by the Federal Trade Commission some time ago, alleging unfair methods of competition and violation of law in the fixing of prices and margins on gasoline in Tampa and vicinity.

The company denies that it is or has been guilty of any of the unfair practices charged. It admits that it was at one time a member of the Tampa Automobile Dealers' Association and the Tampa Retail Gasoline Dealers' Association, both named in the commission's complaint, but since October, 1921, has not been connected with either association. The latter is now out of existence, according to a number of answers which have been filed in the case.

The Peninsular Co. says in its answer that it was not a dealer in gasoline in Tampa prior to June, 1922, "but dealt in lubricating oils and greases and handled small quantities of gasoline only for the accommodation of a few customers, and such gasoline was purchased from other companies and was delivered to said customers of this respondent. The company had no gasoline tanks or storage facilities for the handling of gasoline in Tampa or in the surrounding territory prior to June, 1922.

The company has no knowledge of the matters and things alleged in the complaint, according to its answer.

Utah Hydrocarbons Studied

A study of the natural hydrocarbons of Utah has been initiated by the Department of the Interior at the Salt Lake City experiment station of the Bureau of Mines. These natural hydrocarbons include gilsonite, elaterite, wurtzilite, grahamite, ozokerite and others. Although these substances have been known for many years, they are not yet well understood. With the exception of ozokerite and the other mineral waxes, they all more or less resemble asphalt in that they are dark brown or black bituminous substances of organic origin, generally with a resinous luster. Ozokerite, usually light in color with a waxy luster, is closely allied to the others of the series, but is generally considered separately.

Albert F. Clark, research fellow, has been assigned to study these hydrocarbons from the standpoint of their chemical nature and with the idea of developing new uses for them.

Massachusetts Probes Gasoline

The Massachusetts Commission on the Necessaries of Life is conducting an investigation into gasoline prices in the State. The commission has ruled that it has the power to conduct the investigation, regardless of whether gasoline is a necessary. Mayor James M. Curley of Boston had complained to the commission that Massachusetts is the victim of discrimination in gasoline prices. Chairman Eugene C. Hultman of the commission states that forty-six of fifty principal dealers have responded readily with information requested, and that the tardy four will be summoned to produce their books and accounts unless they, too, furnish such information.

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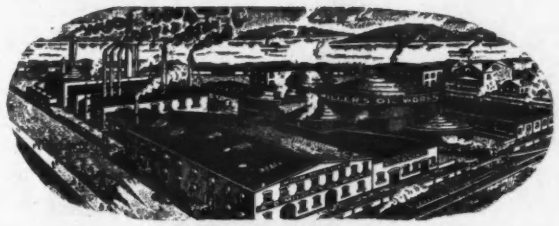

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Petroleum Products Exported During June By Customs Districts and Destinations

According to Countries of Destination

	Crude petroleum. Gallons.	Refined petroleum products: Gasoline, naphtha and other light products Gallons.	Illuminating oil. Gallons.	Gas and fuel oil. Gallons.	Paraffin wax: Unrefined. Pounds.	Paraffin wax: Refined. Pounds.
Austria	50	.....	.....	.....	.....	.....
Belgium	.....	4,659,614	3,935,283	1,446,371	45,343	314,654
Denmark	.....	559,933	3,106,643	1,520,000	35,970	69,318
Finland	.....	371,645	2,130,638	.....	85,507	.....
France	1,201,686	15,683,335	2,600,616	4,263,072	.....	300,594
Germany	2,551,187	2,991,464	333,246	.....	44,800	227,798
Italy	.....	2,047,293	1,299,595	3,789,662	621,200	1,462,209
Netherlands	.....	360,377	3,177,693	.....	.....	275,000
Norway	.....	.....	1,005,383	570,742	19,470	.....
Portugal	.....	3,545	1,250	1,000	53,900	574,329
Spain	.....	.....	3,400	971,112	.....	645,526
Sweden	.....	1,129,623	1,428,914	800,000	345,346	3,640
Turkey in Europe	.....	.....	.....	.....	.....	336,600
England	3,050,000	20,886,442	9,530,125	17,167,023	4,742,296	1,392,868
Scotland	.....	.....	20,110	.....	.....	200,094
Ireland	.....	.....	.....	.....	428,195	178,298
Yugoslavia, etc.	.....	.....	49,500	.....	.....	.....
Canada—						
Maritime Provinces	5,609,523	32,928	2,236	934,085	.....	.....
Quebec and Ontario	23,009,593	3,002,297	255,395	2,453,717	44,496	32,093
Prairie Provinces	7,878,794	621,800	129,305	10,270	.....	6,278
Brit. Columbia & Yukon	6,869,201	302,898	16,848	4,293,600	.....	.....
British Honduras	.....	6,595	18,290	.....	.....	.....
Costa Rica	.....	9,728	11,500	.....	.....	181,480
Guatemala	.....	11,565	14,830	5,720	.....	51,087
Honduras	.....	33,945	18,960	.....	.....	35,411
Nicaragua	.....	55,790	15,545	.....	.....	40
Panama	2,940,000	582,700	2,700	11,760,000	5,500	10,720
Salvador	.....	39,565	22,100	208	.....	22,000
Mexico	38,915,252	174,243	24,957	5,636,977	68,900	522,910
Newfoundland, etc.	.....	2,232	8,000	.....	220	3,000
Bermuda	.....	.....	10,700	.....	.....	.....
Barbadoes	.....	.....	101,480	.....	.....	.....
Jamaica	.....	41,193	27,571	.....	.....	.....
Trinidad and Tobago	.....	.....	4,800	360	.....	.....
Other British West Indies	.....	46,198	45,120	15,000	.....	.....
Cuba	.....	1,024,810	12,202	2,500	.....	207,264
Dominican Republic	.....	59,563	51,510	35,301	.....	10,250
Dutch West Indies	.....	20,000	13,000	.....	.....	.....
French West Indies	.....	22,005	22,500	.....	.....	.....
Haiti	.....	27,835	30,000	30,155	.....	.....
Virgin Islands of U. S.	.....	8,500	22,214	2,226,000	.....	500
Argentina	6,510,000	4,820,278	1,456,520	2,898,642	.....	687,940
Bolivia	.....	500	1,555	.....	47,224	50,718
Brazil	.....	1,161,680	2,271,040	132,211	.....	160,407
Chile	.....	32,333	22,500	11,550,000	67,739	1,021,252
Colombia	.....	31,237	9,529	.....	66,707	355,917
Ecuador	.....	10,000	10,000	.....	.....	329,160
British Guiana	.....	.....	.....	1,250	.....	.....
Dutch Guiana	.....	2,500	25,000	7,500	.....	.....
French Guiana	.....	.....	600	.....	.....	.....
Peru	.....	.....	4,363	.....	.....	517,811
Uruguay	.....	101,000	350,000	938,786	.....	.....
Venezuela	.....	35,902	42,880	.....	.....	144,326
Aden	.....	.....	304,000	.....	.....	.....
British India	3,647,384	.....	5,173,324	.....	.....	6,600
Straits Settlements	.....	.....	219,970	2,333,333	.....	.....
China	3,179,400	106,900	12,824,320	8,442,000	.....	961,777
Java and Madura	.....	.....	.....	.....	.....	26,400
Other Dutch East Indies	.....	.....	609,000	.....	.....	.....
Hejaz, Arabia, etc.	.....	.....	150,000	.....	.....	.....
Hongkong	2,520,000	142,500	1,515,930	2,000,000	211,050	651,413
Japan	.....	603,141	2,317,780	2,604,220	844,069	751,464
Kwangtung	.....	30,000	178,310	.....	.....	.....
Palestine and Syria	.....	395,600	152,624	.....	.....	.....
Philippine Islands	.....	500,000	.....	4,914,000	.....	110
Turkey in Asia	.....	280,000	870,000	.....	.....	.....
Australia	.....	4,018,748	2,347,279	87	56,000	49,490
British Oceania	.....	2,160	3,300	2,832	.....	.....
French Oceania	.....	.....	6,950	1,000	.....	.....
New Zealand	189,420	1,447,991	140,000	2,384,886	.....	4,480
Other Oceania	.....	.....	250	500	.....	.....
Belgian Kongo	.....	62,200	45,000	.....	.....	.....
British West Africa	.....	228,163	368,700	12,300	.....	.....
British South Africa	.....	808,050	1,525,070	.....	.....	529,375
Canary Islands	.....	24,700	24,000	.....	.....	30,083
Algeria and Tunis	.....	410,513	1,390,289	.....	.....	.....
Other French Africa	.....	50,700	96,250	.....	.....	.....
Morocco	.....	28,500	20,200	.....	.....	.....
Portuguese East Africa	.....	102,355	147,330	.....	33,502	866,177
Other Portuguese Africa	.....	31,350	10,430	.....	.....	.....

	Lubricating oils: Red and pale. Gallons.	Black. Gallons.	Cylinder. Gallons.	Light oils in small packages. Gallons.	Lubricating greases. Pounds.	Residuum and other products n.e.s. Gallons.
Austria	.....	.....	2,252	.....	.....	.....
Belgium	3,623,115	227,919	215,480	.....	118,484	13
Bulgaria	1,100	.....	17,050	.....	11,099	.....
Denmark	278,300	.....	180,088	5	100,835	.....
Finland	6,410	.....	44,503	.....	3,675	.....
France	3,081,865	295,659	743,569	.....	285,532	.....
Germany	3,263,105	.....	959,489	.....	318,029	7,219
Gibraltar	600	.....	.....	.....	.....	.....
Greece	19,380	9,250	1,500	.....	13,250	.....
Iceland and Faroe Islands	846	.....	.....	.....	.....	.....
Italy	1,609,192	3,250	572,592	.....	53,519	.....
Malta, Gozo, etc., Islands	482	.....	.....	.....	.....	.....
Netherlands	981,784	5,000	57,650	.....	75,896	.....
Norway	68,085	180	15,538	1,420	76,468	.....
Poland and Danzig	14,500	5,000	20,500	.....	24,050	.....
Portugal	223,153	12,700	114,492	.....	98,144	.....
Spain	519,157	31,700	172,026	.....	162,393	.....
Sweden	401,641	.....	134,088	54	36,674	.....
Switzerland	7,250	.....	.....	.....	3,227	56
Turkey in Europe	53,195	11,945	9,195	.....	.....	.....
England	7,790,726	155,577	1,407,507	302	914,800	.....
Scotland	734,822	7,575	91,559	.....	57,346	.....
Ireland	36,366	1,500	6,382	.....	219,541	.....
Yugoslavia	39,150	8,350	21,600	.....	64,050	.....
Canada—						
Maritime Provinces	8,572	.....	21,273	10	3,415	.....
Quebec and Ontario	559,934	3,599	377,998	962	303,272	206,825
Prairie Provinces	24,314	13,580	194,416	139	83,083	16,209
British Columbia and Yukon	67,193	6,548	35,423	444	32,171	.....
British Honduras	2,130	.....	1,001	24	1,135	.....
Costa Rica	1,667	150	635	121	2,762	.....
Guatemala	802	640	928	249	6,166	.....
Honduras	2,769	381	1,857	283	13,343	215
Nicaragua	6,520	.....	3,002	454	1,563	2,150
Panama	11,530	9,987	7,096	136	12,206	500
Salvador	3,735	1,043	7,303	81	3,133	.....
Mexico	184,470	7,422	172,743	4,491	452,226	65
Newfoundland and Labrador	1,305	.....	12,650	21	5,396	.....
Bermuda	30	97	.....	22	.....	.....
Barbados	1,153	.....	2,571	.....	3,319	.....
Jamaica	415	3,216	3,936	.....	5,535	.....
Trinidad and Tobago	4,400	924	9,440	40	5,155	150
Other British West Indies	2,690	212	2,780	8	2,612	150
Cuba	52,132	6,442	65,091	510	112,862	398
Dominican Republic	4,060	100	5,713	32	5,268	.....
Dutch West Indies	800	210	1,120	.....	1,730	.....
French West Indies	3,850	.....	2,375	4	3,989	.....
Haiti	400	.....	1,312	69	2,103	.....
Virgin Islands of U. S.	110	106	921	.....	573	.....
Argentina	271,819	66,739	76,355	499	505,321	.....
Bolivia	527	.....	3,261	101	5,041	.....
Brazil	200,102	16,414	117,646	8	44,391	.....
Chile	96,651	852,062	120,236	865	267,211	.....
Colombia	4,648	3,818	13,216	308	23,554	244
Ecuador	2,218	.....	2,493	58	10,539	.....
British Guiana	3,700	250	3,083	.....	8,805	.....
Dutch Guiana	1,500	561	.....	.....	.....	.....
French Guiana	500	.....	103	.....	200	.....
Peru	21,908	3,893	45,266	680	53,449	.....
Uruguay	7,559	1,285	5,523	154	4,020	.....
Venezuela	14,627	2,695	8,063	693	9,427	.....
Aden	550	.....	480	.....	.....	.....
British India	484,091	1,658,257	277,231	34	222,566	25,000
Ceylon	11,250	1,250	2,647	144	.....	.....
Straits Settlements	91,260	8,140	73,889	8	54,030	.....
China	244,538	53,040	97,229	116	75,981	.....
Chosen	.....	.....	300	8	.....	.....
Java and Madura	213,015	2,750	34,250	.....	23,300	.....
Other Dutch East Indies	11,150	440	.....	.....	100	.....
French Indo-China	5,000	.....	.....	.....	.....	.....
Hong Kong	153,156	3,000	37,176	1,012	35,370	.....

	Lubricating oils					
	Red and pale. Gallons.	Black. Gallons.	Cylinder. Gallons.	Light oils in small pkgs. Gallons.	Lubricating greases. Pounds.	Residuum and other products N.E.S. Gallons.
Japan	511,241	1,000	210,074	12,891	422,756	49,530
Kwangtung	93,310	12,500	.....	.....	48,881	.....
Palestine and Syria	35,895	.....	550	.....	48,832	.....
Philippine Islands	77,711	23,250	6,144	668	30,786	.....
Siam	500	.....	2,024	28	.....	.....
Turkey in Asia	10,990	.....	.....	.....	.....	.....
Australia	605,785	17,387	336,333	2,014	250,014	.....
British Oceania	30	.....	.....	60	240	18
French Oceania	486	.....	712	27	282	.....
New Zealand	59,791	7,324	41,060	122	76,924	.....
Other Oceania	192	.....	.....	195	550	.....
Belgian Kongo	.....	.....	9,357	.....	1,239	.....
British West Africa	1,000	.....	4,252	.....	261	.....
British South Africa	153,126	29,266	176,110	162	322,714	.....
Canary Islands	5,370	.....	3,694	.....	.....	.....
Egypt	50,867	12,750	28,332	.....	20,257	.....
Algeria and Tunis	3,766	.....	.....	.....	.....	.....
Other French Africa	873	.....	1,550	.....	200	.....
Liberia	.....	.....	145	.....	.....	.....
Morocco	4,500	.....	3,500	.....	.....	.....
Portuguese East Africa	24,500	18,160	64,284	.....	204,250	.....
Other Portuguese Africa	.....	.....	.....	500	.....	.....
Spanish Africa	215	.....	450	.....	2,800	.....

According to Customs Districts

	Refined petroleum products					
	Crude petroleum. Gallons.	Gasoline, naphtha and other light products Gallons.	Illuminating oil. Gallons.	Gas and fuel oil. Gallons.	Paraffin wax Unrefined. Pounds.	Paraffin wax Refined. Pounds.
Maine and N. H.	.....	14,261	2,236	.....	.....	.....
Vermont	.....	155,832	.....	9,984	.....	150
Massachusetts	.....	2,232	2,694	1,764,000	220	.....
St. Lawrence	20,181	156,541	3,409	107,635	.....	1,060
Rochester	.....	.....	389	.....	727	950
Buffalo	16,587	685,116	202,716	671,612	43,769	29,873
New York	50	19,120,023	30,572,629	3,124,441	3,244,194	8,423,820
Philadelphia	.....	6,320,547	6,866,373	6,000	948,746	1,099,130
Maryland	.....	.....	44,242	.....	2,330,631	99,000
Florida	.....	1,390,284	260	2,228,500	.....	.....
New Orleans	.....	19,062,911	5,617,960	2,984,900	1,073,216	3,345,900
Sabine	2,551,187	5,379,680	14,553,536	11,902,997	.....	549,403
Galveston	6,813,663	450	.....	10,203,799	.....	.....
San Antonio	60,857	18,446	3,730	1,093	136	152,074
El Paso	.....	24,862	1,162	122,964	.....	11,380
Arizona	165,376	47,375	310	57,930	.....	.....
Los Angeles	67,094,300	6,401,789	169,994	33,410,115	.....	100
San Francisco	4,844,969	9,366,032	5,902,531	28,655,611	225,795	1,192
Washington	72,000	27,325	15,395	60,000	.....	577,100
Alaska	.....	50,318	300	.....	.....	.....
Montana and Idaho	2,480,704	8,823	100	.....	.....	.....
Dakota	5,474,399	572,920	95,513	200	.....	3,278
Duluth and Superior	4,392	101,412	40,800	32	.....	.....
Michigan	17,321,737	1,977,919	41,618	844,609	.....	360
Ohio	1,151,088	955	255	.....	.....	.....
Porto Rico	.....	11,603	300	.....	.....	500

	Lubricating oils					
	Red and pale. Gallons.	Black. Gallons.	Cylinder. Gallons.	Light oils in small pkgs. Gallons.	Lubricating greases. Pounds.	Residuum and other products N.E.S. Gallons.
Maine and New Hampshire	3,980	.....	2,683	10	239	.....
Vermont	158	.....	747	21	.....	69,030
Massachusetts	1,208	.....	1,764	.....	1,752	.....
St. Lawrence	128,660	56	89,782	684	40,713	20,445
Rochester	9,428	2,015	13,832	.....	32,431	.....
Buffalo	304,302	.....	241,367	36	150,132	11,400
New York	8,178,284	629,742	4,952,233	9,231	4,212,665	82,906
Philadelphia	7,613,862	661,467	1,310,532	.....	582,095	.....
Maryland	97,491	36,060	172,377	.....	153,719	.....
Virginia	.....	.....	.....	.....	4,767	.....
South Carolina	.....	.....	15,569	.....	9,050	.....
Florida	10,096	212	16,405	.....	1,070	68
Mobile	.....	265	6,516	.....	.....	.....
New Orleans	275,185	406	247,252	596	268,471	2,365
Sabine	2,546,347	1,346,845	1,233	38	618,051	.....
Galveston	4,461,954	9,995	9,813	4	42,969	.....
San Antonio	32,392	121	106,296	3,672	32,827	10
El Paso	2,029	90	5,039	24	21,757	55
Arizona	2,954	2,626	1,767	38	18,087	.....
Los Angeles	4,026	840,436	1,691	84	2,789	.....
San Francisco	3,318,362	74,395	49,168	15,994	95,515	18
Washington	26,641	6,393	35,139	313	18,842	.....
Alaska	22	.....	.....	.....	240	.....
Montana and Idaho	6,133	155	10,230	.....	25	.....
Dakota	31,468	13,580	149,289	270	8,632	16,495
Duluth and Superior	1,500	40	28,670	198	76,374	.....
Michigan	111,014	.....	55,917	23	80,188	105,950
Ohio	13,627	1,488	202	.....	531	.....
Porto Rico	.....	106	.....	.....	.....	.....

Petroleum Exports in July

		July 1923	July 1922	Seven mos. ended July 31 1923	Seven mos. ended July 31 1922
Petroleum, crude	Gallons	63,755,613	37,094,148	389,110,619	229,676,563
	Value	$2,463,499	$1,795,715	$13,615,279	$11,026,926
Total refined petroleum	Gallons	260,366,408	183,231,385	1,823,125,763	1,428,401,046
	Value	$27,060,076	$27,504,334	$200,410,184	$188,694,085
Gasoline, naphtha and other light products	Gallons	80,093,175	58,642,902	485,104,241	367,399,248
	Value	$13,180,832	$13,794,352	$88,036,567	$81,310,938
Illuminating oils	Gallons	58,915,195	50,397,684	462,996,396	495,145,915
	Value	$5,074,528	$5,286,275	$45,160,958	$46,530,554
Gas and fuel oils	Gallons	98,064,819	45,897,089	659,550,536	367,358,325
	Value	$2,972,954	$1,783,614	$20,066,642	$15,149,402
Lubricating oils	Gallons	22,693,214	28,293,710	215,474,590	198,497,558
	Value	$5,831,762	$6,640,093	$47,146,017	$45,703,191
Paraffin wax	Pounds	26,605,396	29,846,238	194,549,021	154,707,959
	Value	$920,631	$992,804	$6,727,858	$5,091,944

Plans are being prepared by the Prudential Oil Company for the erection of two steel tanks, each 120 by 40 feet, at Baltimore, for the storage of oil, at a cost of approximately $100,000.

At its recent meeting the Rocky Mountain Association of Petroleum Geologists discussed the facts and fancies of various geological literature. E. R. Lloyd was the principal speaker.

Gossip of the Petroleum World

The steamer Comanche cleared from New Orleans September 8 with a cargo of gasoline for London.

The work of installing Diesel engines on the tanker Bidwell was completed last week at Chester, Pa., and the vessel is again in commission.

A recent issue of "Lubrication," published by the Texas Co., contains interesting articles on the lubrication of driving chains and road building machinery.

J. O. Law, of the Texas Co. staff, Denver, was one of the party of 70 men who visited cities of Western Colorado during the week ended September 9.

The Standard Oil Co. of Louisiana has moved its office to the United Fruit Building, New Orleans, and requests that its mail be directed only to New Orleans, La.

The Louisville Petroleum Refining Co. started work September 10 on its new $300,000 refinery at Louisville. The first unit will have a daily capacity of 1,000 barrels of crude oil.

Public utility power plants during July used 1,161,644 barrels of fuel oil in the production of electric power. Consumption of natural gas by public utility power plants in July totaled 3,169,192,000 cubic feet.

The Blue Mountain Oil Co. has recently closed leases on more than 15,000 acres of land in the Prineville section of Eastern Oregon, and is going ahead putting more privately owned land under lease. It is stated that there is a good indication of oil there in the ancient sea bed formation.

At a receiver's sale held in Warren, Pa., recently, the plant of the Eastern Oil Refining Co. was disposed of for $15,000 to rank Von Tackey, Titusville. The Pennsylvania Oil Products Co. was the next highest bidder with $10,000. The plant, remodeled some time ago, has not been in operation for five months.

While James Owen, president of the Salt Creek Consolidated Oil Co., was en route from Denver to Colorado Springs he was seized with severe cramps. He was hurried back to Denver, the doctors diagnosing the ailment as acute appendicitis. An operation was performed and the patient is doing as well as might be expected.

Regardless of any reports to the contrary, it is said that the Sinclair interests will soon have a pipeline connecting Teapot dome in Wyoming with their properties at Bayonne, N. J., and that the pipeline people have paid at the rate of $100 a mile for the privilege. The route covers more than 2,000 miles.

The Union Oil Co. of California has opened a new field at Compton, situated midway between Los Angeles and Long Beach. Its Callender well No. 1, called the Compton wildcat, is said to be on a flush production of 1,100 barrels of oil daily. The oil is of 32 gravity. The Shell Co. of California and the Globe Petroleum Co. have secured large leases in the Compton field.

The Chicago oil industry is sympathizing deeply with Allen C. Hickey, vice-president of the Taxman Refining Co., because of the death of his mother.

The North Shore Distributing Co., Chicago, has taken over the lease of 8,000 square feet at the intersection of Techny Road and the Milwaukee & St. Paul right-of-way, and will operate an oil distributing business. The lease was originally held by the Shaffer Oil & Refining Co., but was transferred to its jobbing subsidiary, the Deep Rock Petroleum Co., which made the transfer.

W. A. Jacobs, a chemical engineer of the Bureau of Mines, has been assigned to duty in Washington for the purpose of making a study of safety methods and devices in use in Eastern oil refineries.

Cosden & Co has invited its contract customers to make a trip to the International Petroleum Congress and Exposition, which will be held at Tulsa, October 8 to 14, entirely at the company's expense. A luxurious special train is being prepared for the occasion and it will serve as the home of the oil men during their entire trip being used as a hotel during the stay of four days at Tulsa.

Ed. J. McMahon, former general manager of the Western Oil Fields Corpn. and at one time connected with the Midwest Refining Co. in the operation of some Wyoming fields, and a former general manager of the Glenrock Oil Co., has been elected president of the Preston Oil Co. It is believed that the election of Mr. McMahon is the starting of the activity promised by the company.

The Massachusetts Public Utilities Commission has forbidden the sale within the state of the stock and securities of Smackover Gusher Oil Co. of Fort Worth, Texas, and the Armor Plate & Non-Shatterable Glass Corpn. of this city. Failure to furnish information sufficiently adequate for the department to rule on the legality of the sale of the stocks in Massachusetts is given as the reason for the actions.

The Royal Dutch Shell Co., through its subsidiary, the Lumina, S. A., has recently completed the construction of an up-to-date oil storage plant in Basel, Switzerland, according to the report of Consul Calvin M. Hitch to the Department of Commerce. Gasoline in Switzerland at present is retailing for 60 centimes per liter, or about 45 cents per gallon, while kerosene retails for 50 centimes per liter, or about 36 cents per gallon.

All records for arrivals of oil at San Francisco during a 24 hour period were broken August 29 when 410,000 barrels arrived in tankers of the various companies from Southern California. The arrivals were the Associated Oil tanker "Frank G. Drum," 75,000 barrels; "W. S. Miller," Standard Oil Co., 80,000 barrels; "Oleum," Union Oil Co., 30,000 barrels; "Hualco," Associated Oil Co., 75,000 barrels, "Los Angeles," Union Oil Co., 75,000 barrels; and "Lubrico," Standard Oil Co., 75,000 barrels.

A study of the effect of various oil well waters on the setting of cement is being made by the Department of the Interior at the petroleum experiment station of the Bureau of Mines, Bartlesville, Okla. The bureau is requesting oil operators to furnish samples of water from wells wheer difficulty has been experienced in securing a proper set. Water samples should be sent to the station at Bartlesville, accompanied by a date sheet giving owner and well number, location and depth of oil, and information regarding the method of obtaining the sample.

Struck by lightning during a severe electrical storm August 27, two 65,000 gallon tanks of naphtha were ignited at the tank farm to keep the fire from Co. of California at San Pablo, Cal., on San Francisco Bay. All efforts to extinguish the fire with chemicals were futile and the fire burned for three days. The tanks finally burst and the oil spread over the ground which had been surrounded by earth bulkheads and burned itself out. A force of 1,000 men was mobilized by the company at the tank fram to keep the fire from spreading to the numerous other tanks. The loss amounted to about $250,000.

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Guaranteed for Performance and sold at Market Prices
"TRIANGLE C"
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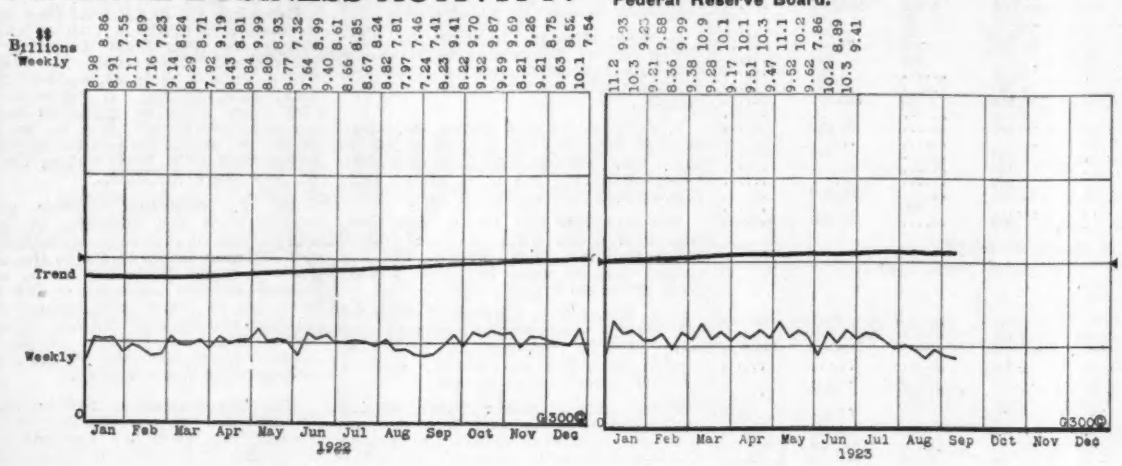
Our "Triangle C" Trade-mark says: This package is made from selected first-grade materials, in a plant that prides itself in up-to-date equipment, efficient organization and rigid inspection.

Oil, Paint and Drug Reporter

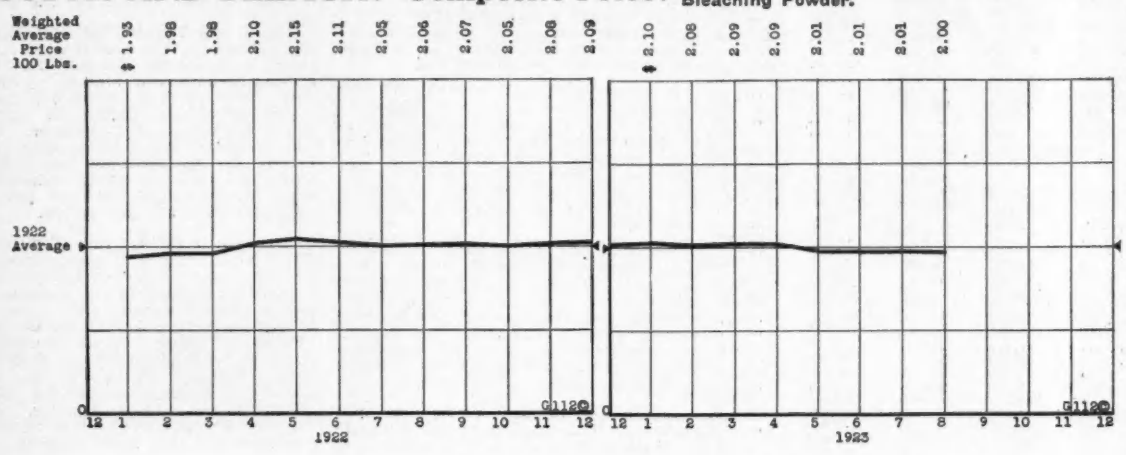
GENERAL BUSINESS ACTIVITY:

As reflected by Debits Records of Federal Reserve Board.



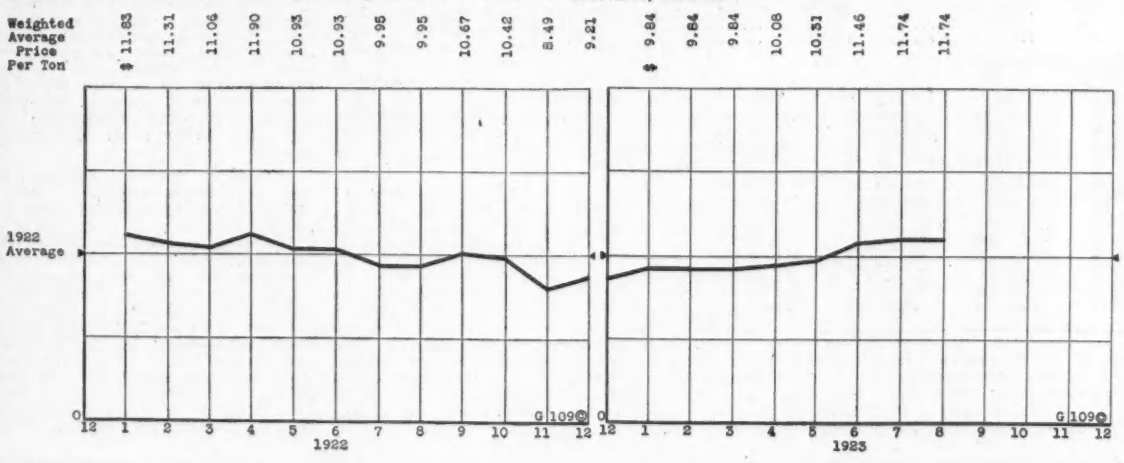
SODAS AND BLEACH: Composite Price:

Weighted Average of Caustic Soda, Soda Ash, Bleaching Powder.



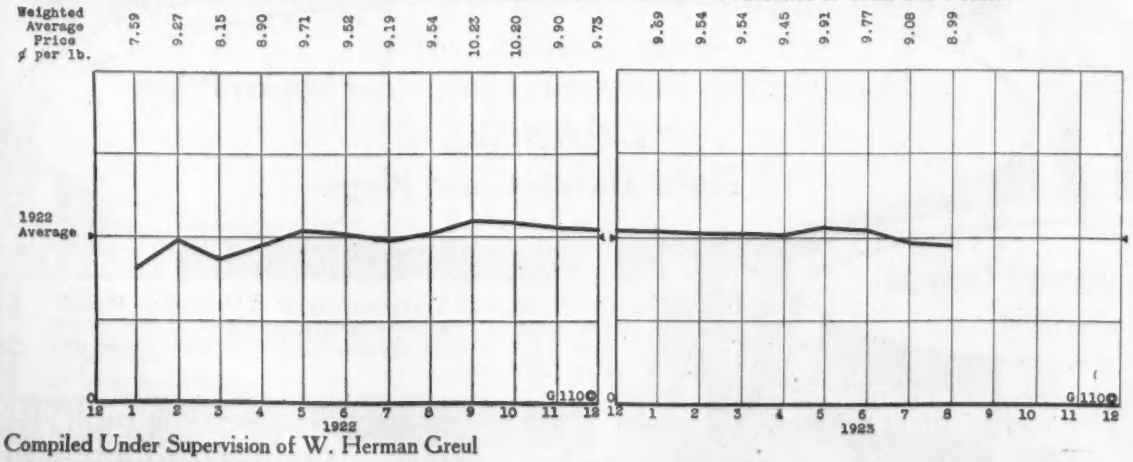
HEAVY ACIDS: Composite Price:

Weighted Average of Sulphuric, Muriatic, Nitric.



TEXTILE CHEMICALS: Composite Price:

Weighted Average of Bichromates and Prussiates of Soda and Potash.



Compiled Under Supervision of W. Herman Greul

Summary

Seasonal price declines were quite prevalent during August in the markets covered by the Oil, Paint and Drug Reporter, a condition which appears to have been general in domestic commerce and industry. The Reporter's analysis of market trends during the month shows but a single advance among the prices charted. This exception was in quotations on aniline oil which enjoyed a brief period of active demand sufficient to emphasize the strengthening influence of moderate supplies. The organic chemical group, however, was weaker as a whole because of drastic reductions in cresylic acid and phenol, resulting from increased domestic production. Minor reductions in bleaching powder and potash bichromate and prussiates were the sole features in heavy chemicals. The paint materials market was softer because of much cheaper linseed oil and lesser reductions in turpentine and dry colors. The long threatened debacle in the petroleum market came with the crashing fall of gasoline, but production of crude oil continued to break records. Details follow:

Sodas and Bleach

There were no changes in the prices of either soda ash or caustic soda during August, but bleaching powder was extremely weak and the price declined abruptly during the first part of the month. Contract withdrawals in ash and caustic were better during August than during July, and showed a gain over the same period of the previous year. A very firm tone characterized prices, but quotations remained at the former levels of $3.16½ per 100 pounds, basis 76 per cent, for caustic; and $1.45, basis 58 per cent, for ash. Bleaching powder was cut from $1.75 to $1.50 per 100 pounds by makers. Since the first of September, these prices have remained unchanged.

Heavy Acids

Conditions in the market for heavy acids underwent little modification during August. There were no changes in prices, and while contract withdrawals in both sulphuric and muriatic were on a decreased scale as compared with the previous month, the tone lost none of its steadiness. Production was maintained, and makers accumulated stocks in anticipation of the fall movement. This increase in stocks was carefully handled, so that prices at the end of the month, with only a record of dullness for the previous two or three weeks, were essentially steady. Sulphuric, 66 degree, was $15 to $16 per ton; and 18 degree muriatic, 90c. per 100 pounds. Nitric was quiet but unchanged at $4.50 per 100 pounds for 36 degree.

Textile Chemicals

Yellow prussiate of soda strengthened at the beginning of August and prices advanced to the highest point in some time—but the advance did not hold. The buying movement which brought about a temporary scarcity ended as abruptly as it began and prices eased again. Prussiates of potash continued to decline, but losses were not marked. Bichromates were easier, but soda yielded nothing during the month, while potash was but fractionally lower. Since the first of September little change has come over the market. Yellow prussiate of soda has declined from 14c. per pound to 13¾c.; yellow prussiate of potash was 33c., while red was down 2c. to 60c. Bichromates went lower, with potash 9¾c. and soda 7¾c.

Analysis of Market Trends

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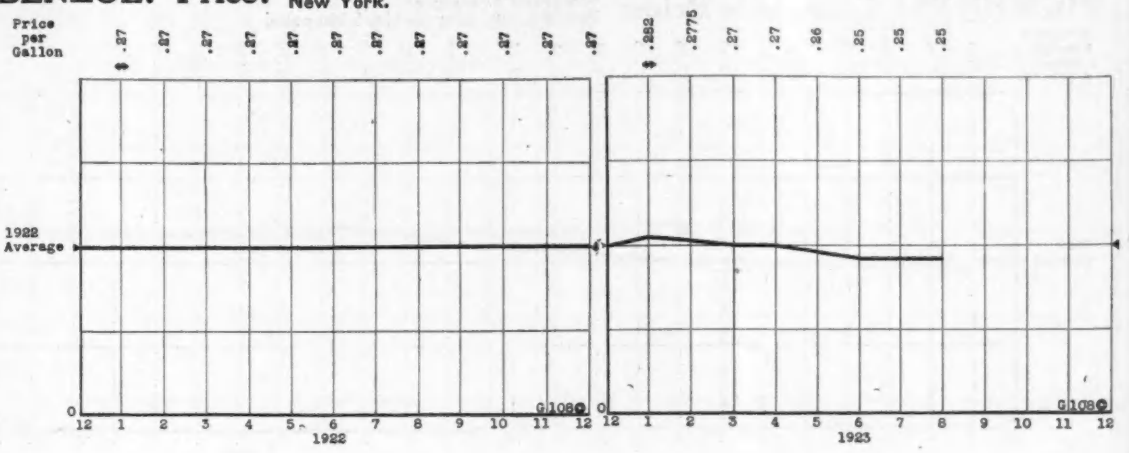
Benzol

The benzol market continued very steady throughout August. The only change was in the volume of goods moving into consumption, which showed a falling off from July. At the same time there was a reduction in production, which served to maintain the steadiness of the tone. Producers have made no changes in quotations for some time now. Prices were based on the 90 per cent. at 25c. to 30c. per gallon. The export situation has shown no signs of recovery, but since the first of September there has been moderate expansion in domestic buying. The position of gasoline has had a dispiriting effect on sales of benzol, and is held responsible for the lack of export business.

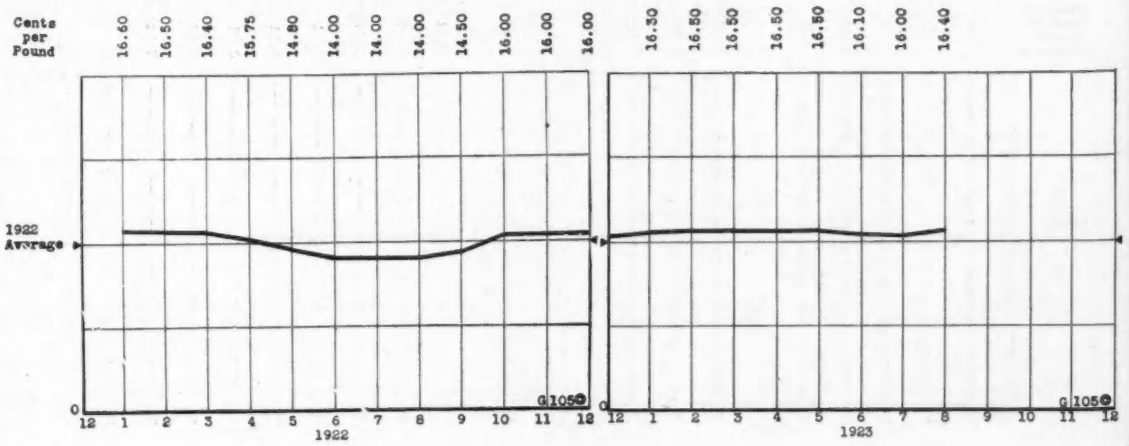
BENZOL: Price: Inside Spot Quotation, 90 Per Cent., New York.



Aniline Oil

Demand for aniline oil got better at the beginning of August, and the decrease in spot stocks as result of this buying movement resulted in higher prices. The advance was only fractional, but it was so readily effected as to indicate the sensitive position of the market. Sales since then have been on a basis of 16c. per pound and a very steady tone has been maintained. Buying did not last long, but the market was sufficiently cleared of surplus stocks to enable sellers to maintain the advance. Conditions since the first of September have registered little change except that the firmness has become more pronounced as inquiry has broadened.

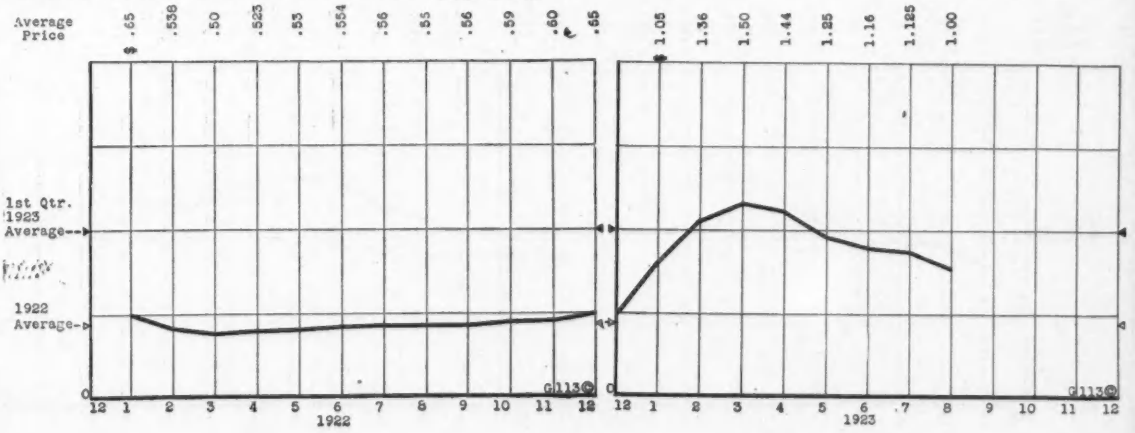
ANILINE OIL: Price: Inside Spot Quotation, New York.



Cresylic Acids

August saw an increase in supplies of cresylics which was not offset by any gain in consumption. The market during the latter part of the month was more liberally stocked and duller than at any time previously during the year. This naturally was reflected in the trend of prices, which was sharply downward toward the end of the month. Pale cresylic acids sold at 90c. a gallon, but by the first of September had gone down 5c. Since then it has gone down another 5c. to 80c. The increase in supplies was brought about by the heavier distillation of imported low-grade acids. Wholly domestic acid was being made by only one refiner, who was so tied up on contracts as to be virtually out of the market.

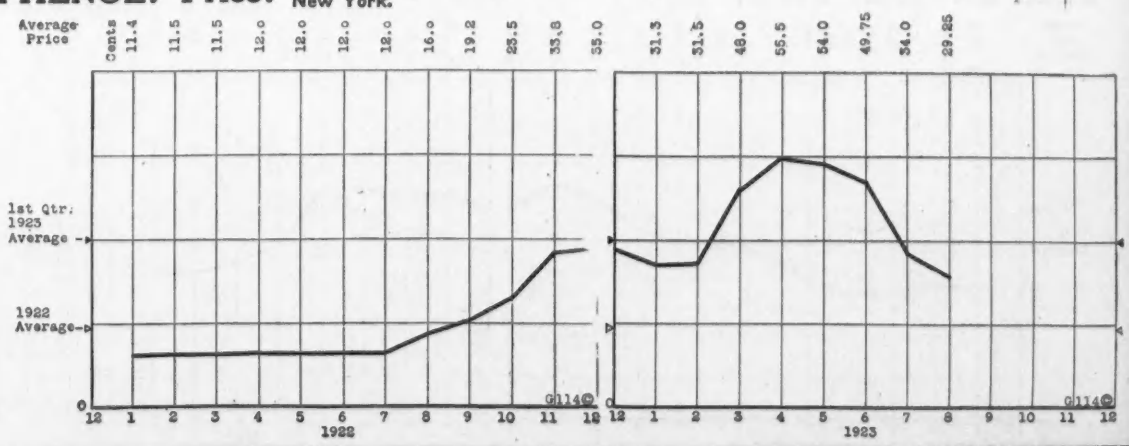
CRESYLIC ACID: Price: Inside Spot Quotation, New York.



Phenol

During August prices of phenol in the resale market were fairly steady. The first week of the month saw a drop of 1c. to 30c. per pound in resale prices and a reduction of over 5c. in makers' quotations. The declines were the result of increased production, accumulation of stock, lack of demand and strenuous competition. The resale market, having been much cheaper than the first-hand market, reacted less to these influences, it had felt them before. Since the first of September prices have declined again, now being 28c. to 30c. from both makers and dealers. The Japanese disaster resulted in an increased inquiry, but comparatively little buying has materialized.

PHENOL: Price: Inside Spot Quotation, New York.



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Oil Paint and Drug Reporter

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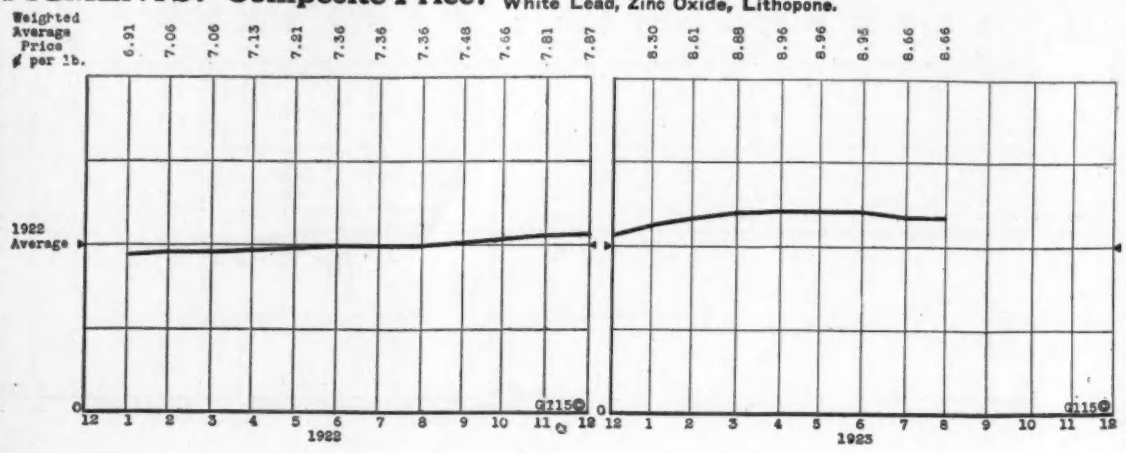
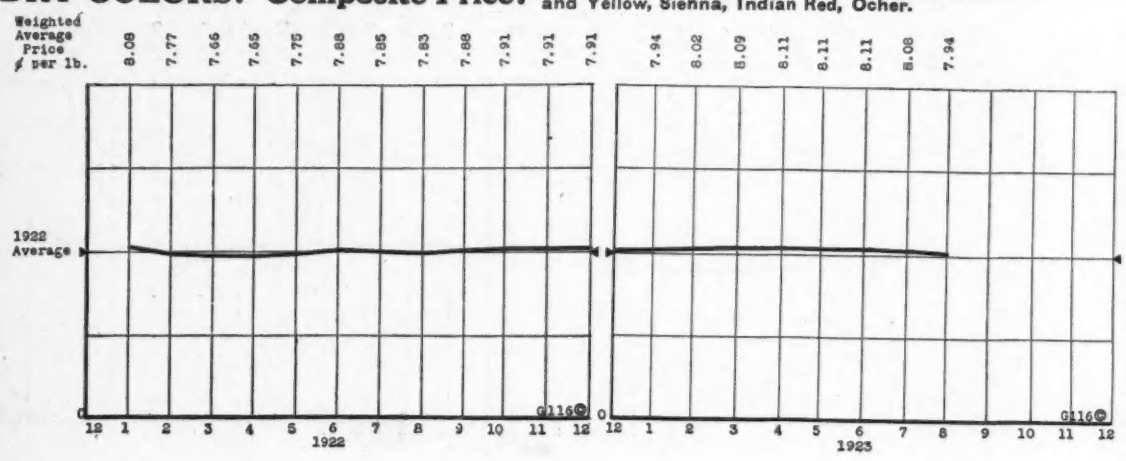
PIGMENTS: Composite Price: Weighted average of White Lead, Zinc Oxide, Lithopone.



Pigments

There was no change in pigment prices during August. The fact that there was an advance in the price of pig lead gave more strength to the market for lead pigments, in which a further decline had been expected, when lead went down to 6 cents a pound. Other pigments held steady. August was a good month in the pigments market, although, as usual, not a period of heavy buying. There was nothing in the character of the demand to encourage price cutting, and nothing in the developments of the market to bring about advances. Prices of all pigments are firmly established and the general opinion is that there is little probability of any price alterations of importance during the rest of the year.

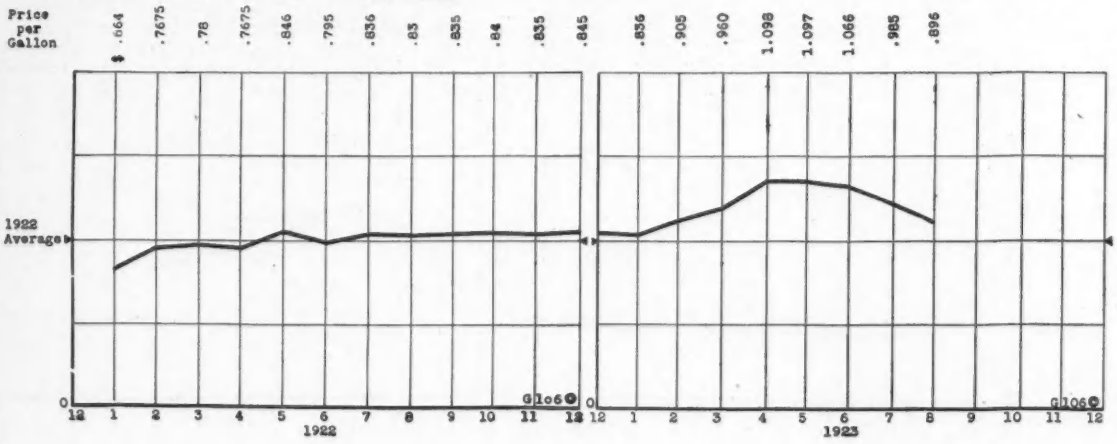
DRY COLORS: Composite Price: Weighted average of Iron Blue, Chrome Green and Yellow, Sienna, Indian Red, Ocher.



Dry Colors

All changes in dry color prices during August were declines. The price of carbon black dropped about 4c. a pound, being 16c. in cases in the local market at the end of the period. There was a decline of 2 cents a pound in the prices of C.P. chrome greens and a reduction in the price of quicksilver brought about a cut of 5c. a pound on English vermilion. A slight advance in the average of dry color prices during the early part of the year has been followed recently by a downward trend of the market. The majority of the dry colors have held unchanged, but some important chemical colors have declined enough to bring the average price for August down to the level of the first month of the year.

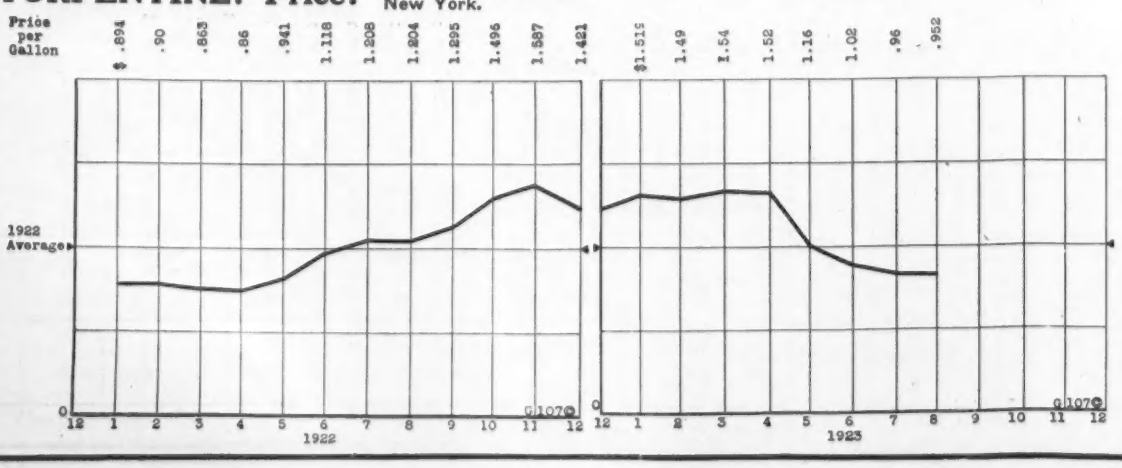
LINSEED OIL: Price: Inside Spot Tanks Quotation, New York.



Linseed Oil

The tendency of linseed oil was downward during August. At the opening of the month 95c. per gallon was the prevailing quotation for raw oil in tank cars on spot. Later there was a decline to 93c., subsequently to 91c. and then to 86c., where it stood at the close of the month. Early in September there was a further decline to 83c. per gallon and that was the prevailing quotation September 13. Depressing factors were bearish reports in regard to flaxseed supplies and sluggishness of trade in oil. The United States Government in its September flaxseed crop report increased its estimate of the yield to 19,400,000 bushels. The latest official Argentine estimate was 64,000,000 bushels.

TURPENTINE: Price: Inside Spot Quotation, New York.



Turpentine

A decline of 3c. occurred in turpentine early in August to the basis of 95c. per gallon in carloads as compared with 98c. at the close of the previous month. Later there was an advance to 96c. per gallon, followed by a recession to 95c., which was the ruling quotation at the end of the month. During the first week of September 95c. per gallon continued to be quoted, but the tone of the market seemed to be somewhat firmer, with offerings generally light and advances to $1.02 have since been made. New business was quiet much of the time, but a steady movement of turpentine into consuming channels on unfilled contracts prevented a rapid increase in supplies.

Analysis of Market Trends

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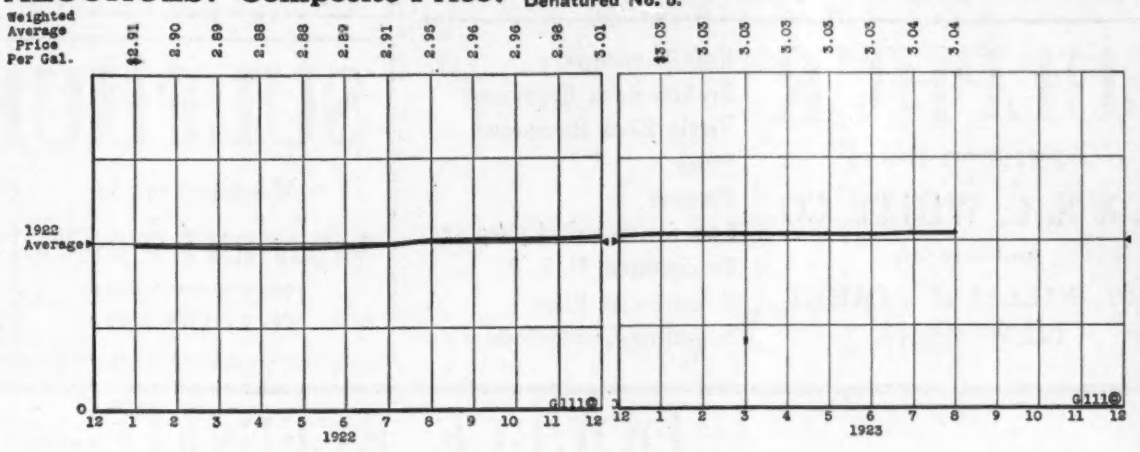
Alcohols

Alcohol prices were unchanged during August. Completely denatured No. 5 ruled at 43c. per gallon; methanol (wood alcohol) at $1.13, and ethyl at $4.77. In the first week in September, methanol was reduced to 95c. per gallon due to lack of demand and accumulation of stocks. In the second week, denatured was advanced to 44½c. per gallon. This rise was due directly to the increasing demand for industrial alcohol. Further, jobbers are active in covering their winter requirements as they hold practically no stocks from last year. Indications point to a heavy buying movement over the balance of the year.

ALCOHOLS: Composite Price: Weighted Average Ethyl Alcohol, Methanol, Denatured No. 5.

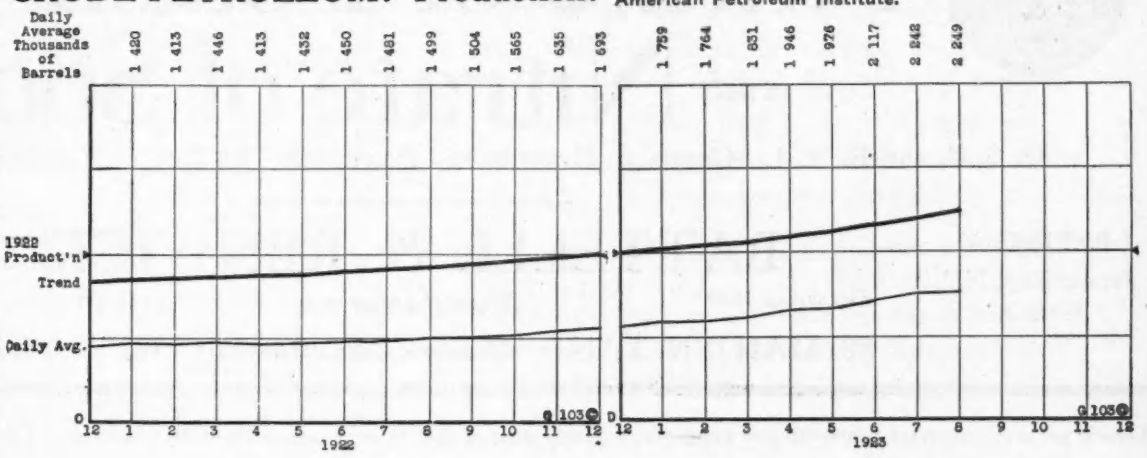


Crude Petroleum

Production

Average daily production of crude oil in the United States was a little larger during August than it had been during July, and as July was a record-breaking month the total production for August was the largest ever known. The daily average for the month was 2,249,000 barrels, or at the rate of 820,885,000 barrels a year (only slightly less than the production of the whole world last year) despite the fact that some progress was made toward curtailment. Much production has been shut in. There was a decrease in drilling during the month, but a greater number of large wells were brought in, and there was nothing that indicated that the much talked of "peak of production" had as yet been reached. Average production in the last week in August was larger than in any other week in the month.

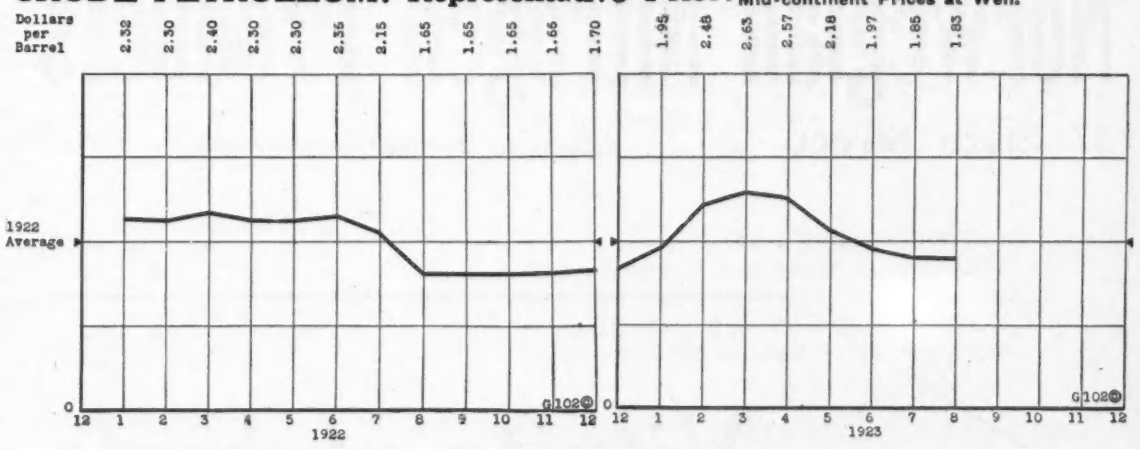
CRUDE PETROLEUM: Production: Daily Average as Estimated by American Petroleum Institute.



Prices

Crude oil prices continued to come down during August—but not in all fields. On the first of the month prices in the San Joaquin field of California were reduced from 1c. to 41c. per barrel to the same level as crude in the other California fields. Other cuts during the month were:—Caddo, Haynesville, El Dorado and Homer, from 15c. to 65c. a barrel; Big Muddy, 15c., and grade A Gulf Coast, 25c. It had been expected that Midcontinent would be reduced, but the change was not made during August. Since the first of September all the companies buying oil in Midcontinent fields, except the one that usually buys most, have reduced their prices from 10c. to 40c. a barrel, making the highest grade of Midcontinent oil $1.80 a barrel, and the lowest grade 50c.

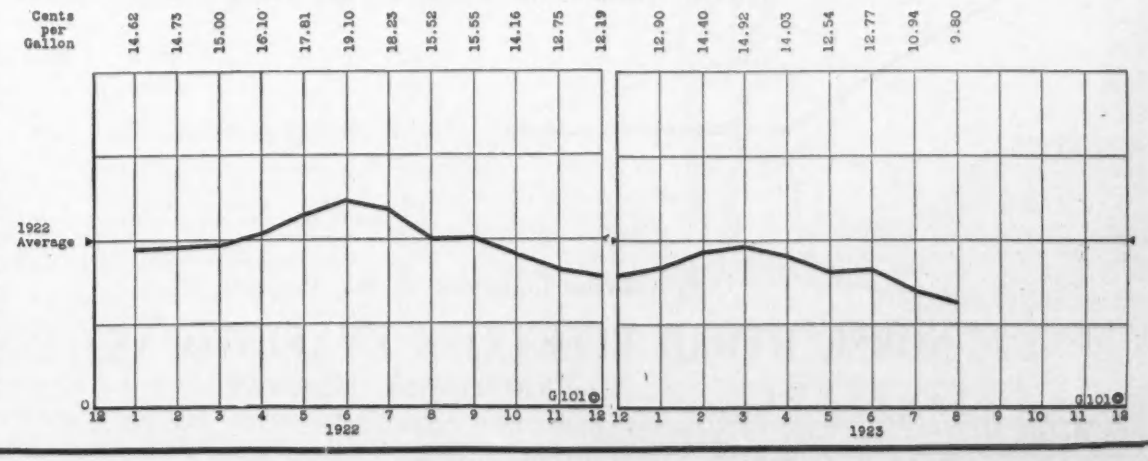
CRUDE PETROLEUM: Representative Price: Average of Pennsylvania, Wyoming and Mid-continent Prices at Well.



Gasoline

The gasoline market was in a demoralized condition during the entire month of August. Refinery prices continued to come down, and there were cuts in tankwagon prices in different sections of the country. At the beginning of the month refiners in the Midcontinent section were asking 9c. a gallon for new navy, but by the end of the month it could be bought for 7c. In all parts of the country there was the same weakness, despite the fact that August is always the month of heaviest consumption. There has been a still further decline in refinery prices since the end of August, Midcontinent refiners were forced to meet a cut to 6½c. in Northern Louisiana, and before September was much more than a week old new navy gasoline was sold as low as 6¼c. at Midcontinent refineries.

GASOLINE: Representative Price: Average of Bayonne, Tulsa and Whiting Refinery Quotations.



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Fertilizer Materials

Mixers Are Showing Little Interest in Raw Materials at This Time—Advance in 30 Per Cent. Manure Salts

The fertilizer materials market was a dull affair last week. It has been such for some weeks, but it had been expected that more interest would be shown by this time. The increased interest has as yet failed to make itself manifest, however, and consumers seem inclined to hold back just as determinedly as they did in mid-summer. It is not because they consider prices high; for some classes of fertilizer materials can be bought very cheap at the present time, and this fact does not seem to help their sale to any extent. Some Southern mixers who were in the market last week seemed inclined to take a very gloomy view of the future, and those who have contracted for large amounts of potash salts and sulphate of ammonia are the only ones who have bought to any extent.

For a long time there has been a slow market for nitrate of soda, and this is one material in which there has been practically no stocking up by fertilizer interests. Importers have found powder makers their best customers recently, and it is said that this business has been placed largely through liberal shading of quoted prices. Now that one of the Department of Commerce agents has discovered that there is no nitrate trust in Chile, all should be well in this market; but business continues very slow. It is doubtful even if an announcement by the gentleman who has made the important discovery concerning this market, to the effect that Chilean producers are selling too low would cause the doubting Thomases of the fertilizer industry to rush in to stock up.

Reports from Chile place the August production at 168,860 tons as compared with 96,809 tons for the same month of last year. Exports were as follows:—Europe, 130,000 tons; United States, 68,500 tons; Hawaii, 8,000 tons; West Indies, 2,000 tons. This would be a good movement if all the material shipped to Europe had been sold, but large stocks are being piled up in European ports, and there is a great deal of uncertainty as to when European consumers are going to be in position to buy and pay for the material. It has never been the policy of producers to pile up stocks in this country in the way they do on the other side.

The sulphate of ammonia market was simply marking time last week waiting to see what the effect of the Japanese disaster was going to be. There is a good deal of this material pointed toward Japan for shipment between now and spring, and it remains to be seen whether it will be necessary to cancel deliveries. If it is, there will be a good deal of material thrown on the resale market, while just at present there is very little resale sulphate offering. Japan had bought very little in this market for some time, but had been expected to begin to show more interest about this time. It is not possible just now to sell for export at the level quoted by the leading distributors, but there is a decided disinclination to name an export price lower than that paid by domestic contract customers. In Great Britain the domestic price is always lower than the export quotation.

Little interest is being shown in organic ammoniates, and the sentiment seems to be to get along with as little of this class of material as possible. While there is no weakness in the fish scrap market, demand is far from active, and there was nothing doing last week in tankage. Cottonseed meal promises to be practically out of the reach of fertilizer users for a long time to come.

There has been no announcement as yet as to potash prices after November 1, but it is expected that an advance of 3 per cent will be announced at that time. In the contracts they have made with members of the groups of consumers, importers have attempted to encourage early buying not only by giving discounts averaging 2½ per cent beyond the 10 per cent discount from list prices, but also by guaranteeing a further discount on all material delivered before November 1, if there is not a 3 per cent advance at that time. It may be that foreign producers will see fit to pay a rebate discount, but it does not seem reasonable to suppose that this will be the case. An advance of $1 a ton in the list price of 30 per cent manure salts was made last week. Consumers had discovered that, according to their relative K_2O contents, 30 per cent manure salts was cheaper than muriate af potash, and this had led to the discovery that the former grade of salts could be made to take the place of muriate in many mixtures. This naturally was hardly satisfactory to producers, and the result was that 30 per cent manure salts has finally been placed on a level with other potashes.

Little interest has been shown by "outsiders" in potashes as yet, but the members of the groups having contracts are accepting their deliveries right along, and importers say that they are satisfied with the position of the market. The negotiations between France and Germany are being watched with great interest by every one in the potash market, and there were rumors current last week that there might be developments soon which would somewhat change the existing market situation. The rumors came from the other side and were quite indefinite.

It was expected that by this time a better market for all sorts of materials would have developed, and the trade hopes that there will be an improvement soon.

Advanced

Blood, high grade ground, Chicago, 10c. per unit.
Cottonseed meal, $1 per ton.
Manure salts, 30 per cent., $1 per ton.
Tankage, garbage, Chicago, $1 per ton.

Nitrogen Fertilizers

NITRATE OF SODA.—There was a very slow market in this material last week, and during the early part of the week its tone was very soft. Little firmer feeling was manifested when sterling exchange showed a little strength, but there was no increase in demand. It is admitted that prices for future delivery can be shaded, but there is nothing new in this, and the fact does not have any influence on the volume of future business being placed. Many persons in the fertilizer business express interest in the report of a representative of the Department of Commerce informing them that there is no nitrate trust in Chile. Having learned from the Department of Agriculture and the Federal Trade Commission all about a nitrate trust, the trade is now informed by another department that it has been grossly deceived. It was generally admitted by the trade that the report of the Federal Trade Commission to the Senate last spring was a very good analysis of the fertilizer situation.

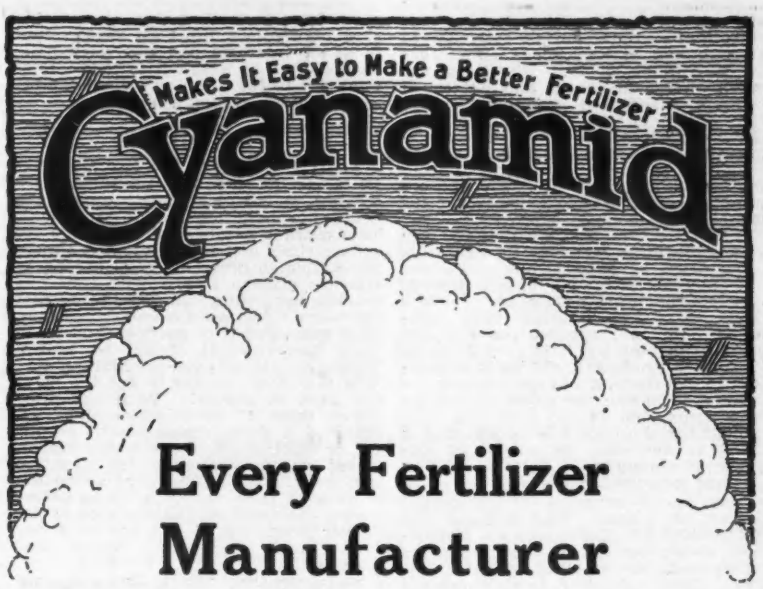
Much interest was shown last week by importers in reports as to the Ruhr situation, for it depends on the European situation largely as to whether there is going to be a chance to hold up nitrate of soda prices, and the European situation hinges on the Ruhr. A large stock of nitrate has been piled up in Europe, and if there is no demand for it, Chilean producers will be in a bad position. Spot was quoted at $2.42 per 100 pounds, with a chance to shade it to $2.40 on business considered especially good. Quotations on futures were largely nominal, as they could be shaded. Powder makers are said to have placed orders over the remainder of the year, but most of the fertilizer bunyers have yet to make their purchases.

SULPHATE OF AMMONIA.—It is yet too early to tell what effect the Japanese disaster is going to have on the market for this material. The feeling is that there may be a good deal of resale material thrown on the market as the result of failure to make deliveries on Japanese contracts, but this is all surmise. One of the best posted men in the market said last week that in about two weeks he thought something would be known as to what to expect, and whether or not Japan will be ready to accept any more deliveries this season. Just now there is very little demand from any source. Domestic consumers have contracted for their supplies for the year

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 8; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

Ask An Advertiser-OPR-Be An Advertiser



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and are accepting deliveries without objection. Production is fully up to normal, and deliveries are going forward without delay. There is not much offered at resale, and not much wanted. There has been little export business done for some time, and Great Britain is as willing as ever to undersell American producers. Prices remained nominally unchanged during the period, and the leading distributors were still asking $3.40 to $3.45 per 100 pounds for double bags f.a.s. New York. It is very possible that if there was some large business in sight this price could be shaded, but there was not enough call for sulphate last week to give the price a fair test. While Great Britain has recently been making a fight to recapture the business lost to this country, it is very doubtful if English producers will be in a position to cut further, as reports from the other side are to the effect that there is a depression in the iron and steel industry in the United Kingdom that is going to decrease the output of sulphate of ammonia.

FISH SCRAP.—There was not much change in the situation in this market during the period. The demand was not active, but there was no disposition shown on the part of producers to try and push it along by price cutting. The catch this season has not come up to expectations by any means, and stocks in the fish factories are not large. Most producers have sold enough to make them in a position to hold for a time, and they continue to turn down bids of $3.75 and 10c. per unit. There are said to have been orders placed for forward delivery at $4 and 10c., but it is not probable that orders for spot delivery at $3.85 and 10c. would have been rejected, and that price as fairly represents the market as any other. Very little interest is shown in wet acidulated scrap.

TANKAGE.—This market was as dull as it is possible for a market to be. There was not enough wanted to test the market out, and holders showed no inclination to attempt to force the situation by price cutting. There was no particular reason for changing the quoted price from $3.55 and 10c. per unit for ground scrap, but it is very doubtful if a single trade was made at that price, and brokers did not seem to have much business that could have been placed at $3.50. There should be more interest shown by feeders at this time of the year, but not much is shown in any of the markets and none at all in the local market.

COTTONSEED MEAL.—The market holds firm and the price still shows a disposition to climb. The poor reports from the cotton crop seem to insure high-priced meal all season, and fertilizer interests can buy very little at the level at which it is held. Last week $34 to $36 a ton was quoted, f.o.b. Southeastern shipping points.

Phosphates

ACID PHOSPHATE.—The fact that all sorts of fertilizer materials are moving slowly just now makes the acid phosphate market quite in line. This market has been a sad affair for a long time, and it has seemed almost impossible to move material except by shading prices. For a long time the market has taken comfort in the fact that conditions could be no worse than they were, but it is getting time when some improvement should be shown. There has been over-production, and it is a difficult matter to get the market back to normal. With the price about what it was before the war, there is a great difference in profits, for production costs are much higher. There was no change in the situation last week, and brokers were as certain as ever of their ability to place orders under the nominal quotation of $8 for 16 per cent. run of pile and $8.50 per ton for 16 per cent. milled and screened.

PHOSPHATE ROCK.—The market seems likely to hold at its present level for some time to come. If there should be some sort of an agreement reached between France and Germany, it would undoubtedly improve the export demand, but the improvement—even if there should be some agreement reached—would, of course, be slow. There is little change in the domestic situation, and little change for materially increasing the number of units operating for some time to come. At the same time the market has a firmer tone than it did have, and there is every reason for expecting that some time or other the industry is going to get back to normal. Quotations follow:—68 per cent. land pebble, $3.25 a ton; 70 per cent., $3.55; 72 per cent., $3.85; basis 75 per cent., 74 per cent. minimum, $4.50; 75 per cent., $5; 77 per cent., $7. All these quotations are f.o.b. mines. Tennessee rock is quoted at $7.50 a ton for 75 per cent., $6.50 for 72 per cent., and $5.50 for 70 per cent.

BONES.—There was little doing in bone materials last week, and prices were nominally unchanged. Quotations follow:—Rough, hard, f.o.b. Chicago, $24 to $25 per ton; soft steamed, unground, f.o.b. Chicago, $17 to $20; ground, steamed 1¼ per cent. ammonia and 6 per cent. bone phosphate, f.o.b. Chicago, $22 to $24; ground, 3 and 50 per cent., f.o.b. Chicago, $26; raw, ground, 4 per cent. ammonia and 50 per cent. bone phosphate, f.o.b. Chicago, $25 to $28; bone meal, New York, $32.

Potashes

There was little change in the situation of the market last week. Consumers who are not members of the three groups which made contracts some time ago are not yet ready to do any buying as yet, but considering the general reluctance to buy any sort of material at this time, this is not surprising. The members of the groups are accepting delivery on their allotments and importers are seeing to it that there is no delay in delivery. It seems to be the opinion of distributors that the plan of distribution is not going to result in the use of any less potash by mixers who do not belong to any association, and if this is the case there will be a good resale market in time. The average price at which deliveries have been made to members of the groups is 12½ per cent. off list prices, plus an allowance for storage. This represents the 10 per cent. quantity discount and the added discount for accepting early delivery. In addition to this these buyers will be entitled to a further discount in case there is not a 3 per cent. advance in prices after the first of November. It might be mentioned that the prices for later delivery have not yet been made public. The discounts they have received would allow the group members to give a discount of 10 per cent. from the list prices and come out with a little profit, but there has not been enough interest shown to permit quoting of resale prices. Imports thus far this year have been heavy, but it is probable that the movement will keep up.

The German importers last week announced an advance of $1 a ton in the price of 30 per cent. manure salts. While there was no announcement to that effect by the French, it is practically certain that they will follow suit. This material is a mixture of manure salts and muriate, and for the last two years has been selling at about 10 per cent. cheaper than muriate, considering its potash contents. Consumers have not overlooked this fact, and there has been such a disposition to use 30 per cent. manure salts instead of muriate that it has been difficult for importers to supply the one while the demand for the other has been interfered with. The advance announced last week puts this material in line with the prices of other potash salts.

The contract prices, with the 10 per cent. discount off, figure out as follows:—Kainit, 14 to 16 per cent., $7.33½ a ton; 12.4 per cent., $6.50; manure salts, 20 per cent., $9.44½; 30 per cent., $15.33; double manure salts, $23.15; muriate, 20 to 85 per cent., $31.09½; sulphate, 39.30.

Pyrites

There was no change in the situation last week. Prices are made to meet the competition of domestic brimstone, and the price of that has not changed for a long time.

Quotations were:—Crude, lump, 11½c.; washed fine, 10c.; furnace size, high grade, 12½c.; lump ore, 12c. per unit.

Baltimore

BALTIMORE, Sept. 13, 1923.

Though it cannot be said that the movement of crude fertilizer materials has attained appreciably larger proportions, a distinctly better feeling was manifested in the trade during the past week, and many members began to take a hopeful attitude toward the future. The ammoniates were especially strong, with offerings none too plentiful, and a disposition was being manifested among buyers to take up stocks whenever practicable to care for the next season's requirements. Practically all supplies called for now are intended to go into the mixtures put out in the spring. Shipments of mixtures, to be sure, will continue for some time to come, with orders none too free and with a shortage of business already accepted as compared with last year. It is not regarded as possible that the deficiency so far recorded can be made up during the balance of the period, and the trade is turning its attention to the more distant future, discerning signs that tend to give decided encouragement and inclining to the view that a definite turn for the better is in prospect. For this reason a steady interest is being manifested in current developments, and stocks are being taken up whenever this can be done on a basis that promises to work out.

FISH SCRAP.—Reports from down the Chesapeake Bay and at the capes as to the menhaden fishing were somewhat more encouraging during the past week, but the catch is stated to be still considerably behind that of last season, the decline being estimated at 30 per cent. or more. Whether it is this or a natural reaction from the quiet that has prevailed, cannot well be determined, but some sales of fish scrap have been made in the last few days at $3.85 and 10 down the bay, which is an advance of 10c. per unit. There are no large stocks at the factories, and the undercurrent in the trade is therefore quite strong. One fishing company which had cut out its boats owing to a scarcity of crews has resumed in a small way, one of its boats having been sent out again. Quotations on acidulated have also firmed up a little, $2.80 being mentioned.

TANKAGE.—Interest is especially active at this time in high-grade ammoniates, and many inquiries are being received by those members of the trade who are thought to have supplies on hand. Feed stocks as well as the grades called for by the fertilizer trade are moving quite briskly, comparatively speaking, and under the influence of the revival quotations have undergone some advance, with 11 and 15 high-grade ground tankage now being held at $3.90 and 10 to $4, c.a.f. basis Baltimore. The improvement is attributed largely to the encouraging advices from the West, where demand is said to be assuming impressive proportions, and where sellers have marked up their figures. Buyers here show some disposition to hold back in the expectation of being able to secure concessions, but such tactics, it is said, are not productive of important results. Garbage tankage has been fairly well cleaned up, with sales of humus tankage still available made at as high as $3.90.

BLOOD.—This material is also receiving a degree of attention such as it had not attracted for some time. Buyers seem rather suddenly to have come to realize that the requirements of the trade are likely to be on a liberal scale and have ascertained at the same time that the tenders are not large, and that, moreover, the producers have avenues of distribution other than the fertilizer factories. This has tended to stimulate the movement and to stiffen values. Some transactions have been made on a lower basis, but as much as $4.15, c.a.f. basis Baltimore, is being asked for high-grade ground.

ACID PHOSPHATE.—This is one of the divisions of the crude material business that does not appear to have responded except indirectly to the better feeling. Producers report no decided gain in the inquiry, and it is still a case of the movement being chiefly on orders taken some time ago. Incidental business is small, as buyers have their attention centered on other matters for the present. Meanwhile quotations remain around $8.50 for 16 per cent., milled and screened, with run of pile proportionately lower.

NITRATE OF SODA.—Nothing has occurred in this market to change the situation to any marked extent. Imports are coming in from time to time, and importers adhere to the figures they have quoted, with the resale trade very small, as the quantity available in the open market is by no means extensive. The official figures stand at $2.45 for the balance of September, $2.47½ for October, $2.50 for December, $2.52½ for January, $2.57½ for February, and $2.60 for March.

NITROGENOUS MATERIAL.—Quotations here are not numerous, and such figures as are available are based mainly on New York. Spot and nearby is nominally quoted at $3.75, but sales for forward delivery, it is said, are being made at higher prices.

POTASH.—Developments are without significance. The foreign syndicates are making delivery on contracts, and some of the material received is going into storage, to be drawn on by the "outsiders." Quotations, with the discounts off, continue at $6.50 per ton for 12.4 per cent. kainit, $7.33½ for 14 to 16 per cent. kainit, $14.43 for 30 per cent. manure salt, $23.15 for double manure salt, $31.09½ for 80 to 85 per cent. muriate, and $39.30 for 90 per cent. sulphate.

BONE.—There has been a marked improvement in inquiry. Stocks are being freely sought, and offerings are not so free as to affect values adversely. Raw bone especially is finding a ready market, with quotations for 4½ and 50 now at $41, and with 3 and 50 ground steamed firm at $34.

SULPHATE OF AMMONIA.—Quotations here on sulphate of ammonia are not numerous, the general tone of the trade being characterized by quiet, and resales few. At the same time it is to be said that the material has benefited from the general quickening of the movement and from the better feeling, with the quotations around $3.25 in double bags, for Baltimore and New York.

Atlanta

ATLANTA, Ga., Sept. 12, 1923.

The market continues dull awaiting the outcome of the cotton crop. Picking has begun in central and north Georgia, but there is much uncertainty about the damage done to unopen bolls by the boll weevil, and the uncertainty will not be cleared up until the second picking is made.

The advances made in the price of cotton during the past week has, however, created a spirit of optimism in the trade.

Acid phosphate remains weak, some large lots being sold to mixers as low as $8.25. The trade has been pushing nitrate of soda because of the recent drop in the English exchange. It is reported that some business is developing.

The price ranges on fertilizer materials are as follows:—

Acid phosphate, $8.25 to $8.50 a ton spot. Tankage—South American at Atlantic ports, 11 1to 12 per cent., $3.90 to $4; domestic, western points, $3.50 and 10. Blood, shipping points, $4 to $4.05. Bone, steamed, 3 and 50, $30.50 to $32; raw meal, 4½ and 50, $37. Nitrogenous material—Eight per cent. foreign shipment at ports, $3.60. Castor meal, 7 to 8 per cent. ammonia, $4.10 c.i.f. ports; rape and castor meal, $4.10 c.i.f. ports. Nitrate of soda, 95 per cent. material, September and October, $2.42. Sulphate of ammonia, Birmingham base, $64.50 to $65 per ton. Cottonseed meal, 7 per cent. meal, $38 to $40 per ton. Potash, no change in price. Kainit, $7.22; manure salts, $10.55; muriate, $34.55; sulphate, $43.67.

(For other Fertilizer Markets, see Index)

The Linde Air Products Co., Savannah, is just completing installation of machinery and will soon be ready to produce oxygen and hydrogen.

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NITROGEN PRODUCTS
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Nitrite of Soda
Sal Ammoniac
Urea
Ammonium Muriate Chloride Bicarbonate

Chicago Petroleum Market

For detailed refinery prices in the Chicago district on all products, see the respective subdivisions of the general petroleum market report beginning on page 41.

CHICAGO, Sept. 12, 1923.

Demand for gasoline is not so good, and the price situation is still weak. Kerosene is firmer, and quotations are a trifle higher. Fuel oil is less strong and gas oil unchanged. Lubricating oils continue in good demand, with firm prices.

GASOLINE.—Since the Labor Day holiday consumption is generally reported as greatly reduced. Supplies seem inexhaustible and the market is still under the influence of the free offers of refiners who wish to move their stocks. Some holders of large stocks who have been waiting for improvement in the market have begun to meet current quotations, and this results in very large offerings with consumption reduced. The bulk of the business consists in forwardings on contracts.

Makers of marginal contracts are still active and the recent position of prices in which the owner of a contract has had a little better price than the spot buyer seems to encourage jobbers to make contracts—if they can get their price. That they are doing so is the opinion of many refiners. One sales manager, this week, offered to make a marginal contract at 4½c. for new navy the year round, and the jobber to whom the offer was made stated that he had at that time three offers of contracts showing margins of 5c., 5½c. and 5¾c. The refiner who offered the 4½c. margin said that he could not figure out how any refiner could possibly make a contract with safety at over 4½c.

Demand right now is practically all for new navy. Very little 56-58 gravity is selling. The call for blends is not large, although some makers of high grade naphtha blends claim to be sold up for the season on contracts. Natural gasoline has advanced quite sharply and grade C is only nominally quoted, as there is practically no supply not under contract. Grade A is still to be had, although the spot supply is light. Natural gasoline is being used very largely to restore the volatile quality to the storage gasoline, and is also wanted to give "pep" to gasoline made from some of the mixtures of crude that are used to get the product down to the market price for gasoline. The demand for natural gasoline is causing an increased call for 50-52 and heavier naphthas for blending with the natural gasoline, to reduce the tank pressure.

KEROSENE.—Demand is fairly good, but rather uneven, as the season is just beginning for the larger consumption of this product. There has been little change in price, except a cut by one concern in its tankwagon prices in Oklahoma, the first real change in the kerosene tankwagon price for some time. Export demand is quiet. There is a continuing good demand for fuels for home heating plants, ranging from kerosene distillate down to 24-26 fuel oils, but so far the bulk of the interest is in a rather light oil, such as a distillate of some gravity between gas oil and kerosene. There is quite a general stocking up by jobbers who have suitable storage. Prices for these grades show no change.

FUEL OIL.—The anthracite strike was not a cause for advancing prices, according to purchasing agents, but they have been quick to make the settlement of the strike a reason for a decline in fuel oils. There are several large inquiries in the market for fuel oil by railroads and other large users, but they seem to give no strength to the situation. One reason is that the quantity of fuel oil produced has not been decreased. Stocks at the end of July showed some increase, and as August is usually a light month in consumption, they have probably not decreased since July. Smackover fuel is also plentiful and selling at something less than group 3 refinery fuel oils.

The demand is hardly up to expectations. Manufacturers are doing a good business in most lines, but they are buying very cautiously, and in some lines have been caught short of supplies and are paying higher prices, but they do not seem to be inclined to buy any more freely of fuel oil on that account. In some instances they figure that there is bound to be a substantial reduction in the price of crude which would be reflected in the price of fuel oils. In this connection many of the independent refiners are now purchasing their crude at substantial reductions from the posted prices of the large purchasing companies. It was formerly the case that practically every independent refiner who did not have his own production, paid a premium, and this would possibly reduce now the cost of crude to the independent refiner at least $1 a barrel.

GAS OIL.—There is still little doing, and supply is in excess of demand. No large contracts are reported in sight and most of the gas companies seem to be using less oil, in some cases because they are using a heavier oil, and in other cases because new processes and requirements enable them to operate on a smaller quantity. Refiners with cracking processes are not buying to any extent. Prices are easy.

ROAD OIL.—The season is at its fag end, and there is no demand except for an occasional belated car. Most refiners have closed out their supplies and have none to sell, but a little can be had at around $1 a barrel.

LUBRICATING OILS.—There is still a good demand and a firm market. Some sellers report that the business in motor oils is not quite so good, but others claim that they are just as busy as ever. Demand for the grades most used in the industries continues active and refiners believe that there will be a continuing improvement as the larger industries get into their most active season. There is less demand from farmers as their season is drawing to a close.

TANKWAGON PRICES.—There has been no quotable change in tankwagon prices in "Indiana" territory, but from several points in that territory come reports of cutting of prices ranging from a fraction of a cent to 2c. The gallonage done during August is reported from all sources to have been very large, but there has been a decided falling off since Labor Day.

Tulsa Petroleum Market

For detailed quotations on refinery products in the Tulsa market, revised to Friday, see the respective products in the general petroleum report, beginning on page 41.

TULSA, Sept. 12, 1923.

The outlook for a readjustment in crude prices has caused a continuation of the unsettled condition in the refined products market during the past week, although refiners for some time have been posting their own prices for crude instead of buying on the schedule of the dominant crude oil purchasers. While buying during the past few days has been very limited, trading has been featured by the amount of rush orders.

Gasoline daily shows indications of its being headed to the absurdedly low level predicted for it. Quotations during the past few days eased off to 6¼c. for new navy. Although this price prevailed a week ago, trading at that level had not assumed the general proportions found this week. And in some quarters it is pointed out that new navy is obtainable at 6c. flat.

The entire refined oil market is as much unsettled at this time as it was many weeks ago when quotations were greatly above current levels. While the movement has been better off and on during the past several weeks, it has even failed to come up to expectations of those observers who are pessimistic in their view, and during the latest week the movement has been still smaller than previously.

The cheapness of products made out of California crude continue to be one of the most bearish factors in this market. Almost in every area where Group 3 products are marketed competition with the Pacific Coast product is very keen and in nearly every instance the latter is crowding out the Oklahoma product. Nearly every day the Group 3 marketing area is being narrowed, consequently shutting off the outlet which this field has always depended upon, thus preventing the rapid decline in stocks which had been anticipated during the period of heavy seasonal demand.

Within the past two or three weeks no further readjustment in refinery operations has been made and practically as much crude is being run to stills today as was run during the middle of August. However, it is being run at cheaper prices, for refiners paying the prices recognized as posted prices—that is, those being paid by the large crude oil-buying agencies—are very few.

GASOLINE.—With new navy generally quoted at 6¼c. a gallon the entire list has weakened accordingly. Some 60-62 grade is being offered at 8c. to 8½c. The trading this week has been smaller than during the previous week, due to the causes mentioned above. Raw natural gasoline, which has exhibited such strength during the past few weeks, is still firm. There are indications, however, that manufacturers regard this as a temporary condition, and some large manufacturers are offering the grade A material over October at 7c. This is taken to mean by the trade that after the September demand for natural gasoline to liven up storage material of the straight run product is past, a reaction will set in on this product. Refiners of the Midcontinent are making every effort at the present time to reduce their gasoline inventories, and it is this business which is furnishing the chief outlet for raw natural gasoline. With the low level that straight run gasoline has reached and the firming up of raw natural gasoline there is little chance for improvement in the blend market. Very few jobbers care to purchase this product when straight run is available at almost the same price.

KEROSENE.—This product is unchanged, although quotations for the 41-43 grade are 3¾c. to 4¼c. It is possible to pick up a car here and there at 3¾c. The 42-43 grade, of which no large amount is made in this territory, rules firm at 4c.

DISTILLATES.—These are firm, but have not displayed the strength anticipated, due largely to the fact that cold weather has not yet set in. A greater consumption is expected.

LUBRICANTS.—While the demand for lubricants continues fair, the supply is a bit more plentiful. The largest manufacturer in this district, whose prices are more or less a barometer, has caught up with his advanced sales and is taking on new business.

FUEL AND GAS OILS.—The recent performance of fuel oil is proving most disappointing. The psychological effect of the anthracite strike has worn off and the reduction in crude, which appears certain, is being discounted. Many industrial and railroad concerns have withdrawn from the market pending the crude adjustment, and the spot market for this product has declired 5c. a barrel. Liberal offerings of cheap Smackover fuel also had a depressing effect. Gas oil is soft, about the only business being that of a routine character. A few large refiners, however, who built up heavy stocks during the early part of this year in anticipation of finding a ready market for cracking purposes are offering it to the utility companies.

WAX.—Crude scale, 124-126, is finding a ready market at prices fractionally higher than the first part of the month. A careful check of the field shows every plant capable of manufacturing this product sold up over September and a few even further in advance.

Oil-Burning Equipment Makers Organize National Association

CHICAGO, Sept. 12, 1923.

As a result of the recent meeting here of manufacturers of oil-burning equipment there has been organized the American Association of Oil Burner Manufacturers. A constitution and by-laws have been adopted, and the new association has the promise of a big future in a rapidly growing industry. Thirty-two firms in the oil burner field were represented at the meeting and participated in the organization.

The following are the officers:—President, Wallace C. Aspen, St. Louis; regional vice-presidents, Ernest H. Peabody, New Orleans; A. M. Lockett, New York; E. G. Rhodes, Chicago; J. T. Vorhies, San Francisco; G. S. Baldwin, Toronto, Canada; secretary-treasurer, L. D. Becker, Galesburg, Ill.; directors, E. P. Bailey, Philadelphia; John Scheminger, Providence; C. E. Bird, Minneapolis; W. R. Ray, San Francisco, and B. M. Oliver, St. Louis.

New Orleans Petroleum Market

NEW ORLEANS, Sept. 12, 1923.

Domestic prices for all petroleum products in this territory are slightly improved. New navy gasoline is quoted at 9¾c. to 10c., delivered, everything paid. Water white kerosene is being sold for 5¼c. to 5¾c. delivered. Bunker fuel oil C is selling at $1.30 per barrel, delivered in the harbor.

Exports this week were fair, five cargoes going forward. Only four cargoes of crude were received, all but one of them coming from Tampico.

Tankwagon and service station prices for gasoline are unchanged, the local service station price being 16½c., tax included. There is some price cutting going on among dealers.

Shipments during the week were as follows:—

Imports

48,000 barrels crude from Los Angeles to Standard Oil Co.

65,000 barrels crude from Tampico to Asiatic Petroleum Co.

22,000 barrels crude from Tampico to Huasteca Petroleum Co.

75,000 barrels crude from Tampico to Huasteca Petroleum Co.

Exports

7,500 tons gasoline and kerosene to La Pallice.

2,100,000 gallons crude to Charleston.

7,400 tons fuel oil to London.

1,725,000 gallons gasoline, 275,000 gallons lubricating oil and 200,000 gallons gas oil to Tampa (800,000 gallons gasoline for discharge at Havana).

2,350,000 gallons naphtha to London.

O'Neil Succeeded by Moody As Head of Prairie Oil & Gas

At a meeting of the board of directors of the Prairie Oil & Gas Co., at Independence, Kan., last week, the resignation of President James E. O'Neil was accepted. Nelson K. Moody was elected president. Other changes in the Prairie administrative personnel were the election of W. S. Fitzpatrick, formerly a vice-president, as chairman of the board, the promotion of D. A. Kelsey to be a vice-president and general manager, and the appointment of F. A. Cook to succeed Mr. Kelsey as superintendent.

Mr. O'Neil's resignation is stated to have been due to the condition of his health. Current reports, however, attribute no little influence in connection with the change to internal dissatisfaction with the company's policy in maintaining its posted prices for Midcontinent crude oil. Talk of a reduction in Prairie quotations to follow the resignation of President O'Neil was prevalent. This cut has not yet been announced.

Announcement was made later in the week of the Prairie company's intention to close its office at 26 Broadway, this city, and to conduct all its business from the home office at Independence.

Miscellaneous Oils

(Continued from page 39.)

Grease, Lard, Stearin and Tallow

The general market was firm and in some cases prices advanced further. Supplies of most products appear to be light. There was a fairly active demand from domestic and foreign buyers.

GREASE.—There was a good inquiry, and the market was firm, with higher prices demanded in some quarters. Supplies of all grades appear to be light. House, 7½c. to 7⅝c. per pound; white, 9c. to 9½c. per pound; yellow, 7½c. to 7⅝c. per pound.

LARD.—There were fewer changes in prices, but the market was firmer in tone, with offerings light. City, $12.65 to $12.75 per 100 pounds; compound, $13 to $13.50; Middle Western, $12.70 to $12.80 per 100 pounds; prime Western, $12.80 to $12.90 per 100 pounds. The tendency of American lard abroad was downward. Export demand was fairly active and clearances from this port were liberal. The Chicago market for lard futures showed weakness at times owing to liquidation and selling for a turn on the short side.

STEARIN.—Offerings were light and the market was firm, with still higher prices demanded, quotations ranging from 12¾c. to 13c. per pound for oleo and 15¼c. to 15½c. for lard. Moderate sales of oleo were reported at the higher level.

TALLOW.—Demand was less active, but offerings were light and the market was firmer, with sales reported on the basis of 8¼c. per pound for extra special, showing a further advance of ¼c. per pound. At an auction of tallow held in London on Wednesday, offerings were large, amounting to 2,535 casks, but demand was more active, and 1,753 casks were sold at from 42s. to 42s. 6d. for mutton and 40s. to 42s. 6d. for beef.

Exports from New York in week ended September 13, in pounds:—

	Lard	Stearin.	Tallow.	Grease.
Friday ..	3,191,933	.....	.....	.....
Saturday	1,556,535	8,400	101,200	1,020,000
Monday..	3,967,429	.....	.....	.....
Tuesday..	57,200	.....	.....	.....
Wed'sd'y	2,992,145	.....	.....	.....
Thursday	2,376,809	.....	.....	.....
Totals ..	14,142,051	8,400	101,200	1,020,000
Prev. week	11,843,201	10,000	558,000	1,383,300
Since Jan. 1.	522,490,564	1,206,800	6,499,200	27,213,160

Chicago

CHICAGO, Sept. 12, 1923.

LARD.—The market has been strong the week through, the strength coming largely from the excellent demand for cash lard, the heavy shipping of lard to foreign countries and the light offerings. There have been only occasional periods of weakening, and these have been temporary and unimportant and largely due to sales for the purpose of realizing on profits. The export movement continues large, shipments for the week being nearly three times as large as a year ago. The shipments for the last week reported were 29,096,000 pounds, compared with 10,020,000 pounds for the corresponding week last year. Foreign markets have advanced steadily. The cash market has been active with large orders placed by domestic and foreign buyers of cash lard, the chief foreign purchases reported to have been of loose lard on account of German buyers. These purchases run the price of loose lard to an equality with regular for some days of the week. During the week regular in round lots has advanced from $11.95 to $12.35; loose lard from $11.85 to $12.25, and leaf lard from $11.75 to $12.00, closing firm.

The range of quotations from the opening on Saturday, September 8, to the close on Friday, September 14, is shown in the following table:—

	Open.	High.	Low.	Close.	Previous Friday.
Cash	$12.35	$12.35	$12.05	$12.15	$12.30
September..	12.20	12.25	11.90	12.02	12.15
October.....	12.15	12.17	11.80	11.95	12.07
January....	10.95	11.07	10.65	10.77	.....

TALLOW.—The demand is active, but at the present moment buyers seem to be afraid to pay the latest advanced prices asked by producers. Offerings are light. Sales of edible tallow were reported at 9c., fancy at 8¼c., and prime packers' at 8c. with asking prices following of a quarter to half cent higher. Present prices are as follows:—Edible, 9c. to 9¼c.; fancy, 8¼c. to 8¾c.; prime packers', 8¼c. to 8½c.; No. 1 packers', 7¾c. to 8c.; No. 2 packers', 6¼c. to 6¾c.; No. 1 renderers', 7c. to 7¼c.; choice country, 8c .to 8¼c.; No. 1 country, 7½c. to 8c.; "B" country, 6¼c. to 7c.; No. 2 country, 6¼c. to 6½.

GREASE.—The offerings continue very light and business is limited largely by that fact as well as the higher prices. The stocks are believed to be larger than the offerings, but so long as the producers are able to hold their supplies and dole out their stocks as they see fit the buyer will have to pay if he wants the goods. Some buyers of animal fats and greases are turning to such substitutes as palm oil, olive oil foots and other oils and greases that have not advanced at least to the same degree as tallows and greases. New York buyers have bid 9¼c. for choice white grease, all hog fat. Pigs' foot grease, 9c. to 9¼c.; choice white, 8¾c. to 8⅞c.; "A" white, 8c. to 8¼c.; "B" white, 7¼c. to 7½c.; cracklings, 6½c. to 7c.; bone naphtha, 6c. to 6¼c.; yellow, 6¾c. to 7c.; brown, 6½c. to 6¾c.; house, 6½c. to 6¾c.; garbage grease, 5½c. to 6c.

STEARIN.—The trading is light but stocks are small and the producers are very firm in their views. Prime oleo stearin, 12¼c. to 12½c.; No. 2 oleo, 12c. to 12¼c.; tallow stearin, 10c. to 10¼c.; "A" white grease stearin, 8c. to 8¼c.; "B" white grease stearin, 7½c. to 7¾c.; yellow grease stearin, 7c. to 7¼c.

Liverpool

Following were the quotations per cwt. on refined American lard in Liverpool for the week:—

	Cash.	Sept.	Oct.	Jan.
	s. d.	s. d.	s. d.	s. d.
Saturday	72 3	72 3	72 3	64 9
Monday	72 3	72 3	72 3	64 9
Tuesday	72 0	72 0	72 0	64 3
Wednesday ...	72 0	71 3	71 0	63 6
Thursday	71 6	70 9	70 6	63 9
Friday	70 6	70 3	70 6	63 6

Following are the quotations per cwt. on Australian tallow in Liverpool for the week:—

	Choice.	Fine, good mixed.
	s. d.	s. d.
Saturday	40 3	39 6
Monday	40 3	39 6
Tuesday	40 3	39 6
Wednesday	40 3	39 6
Thursday	40 3	39 6
Friday	40 3	39 6

London Tallow Auction

LONDON, Sept. 12, 1923.

Tallow was irregular at the auction held here today, mutton being easier and beef firmer at 42s. to 43s. 6d. and 40s. to 42s. 6d. respectively. Offerings were 2,535 casks of which 1,753 were sold.

Animal Oils

The market retained a firm tone, and the tendency of prices in some cases was upward. A somewhat better inquiry was reported, though there was not much snap to business.

DEGRAS.—There was no material change in the situation last week. In some quarters a rather better inquiry was noted, but actual business was apparently limited to moderate quantities. Supplies in some quarters appear to have diminished, and offerings were generally light. Prices ranged from 3½c. to 4¾c. per pound, according to grade and quantity.

LARD.—The market was firmer with an improvement noted in demand in some quarters, though few consumers were disposed to anticipate to any extent. Export trade was generally quiet. Prime, $16.50 per 100 pounds; extra winter strained, $13.50; extra, $12.75; No. 1, $11.50; No. 2, $11.

NEATSFOOT.—Demand was rather more active, and with crude material strong the market was firmer. Pure, $14.25 per 100 pounds; extra, $12; No. 1, $11.50; cold pressed, $17.50.

TALLOW.—The market was firmer owing to increased cost of basic material. Acidless, $12.25 per 100 pounds.

Fish Oils

A steady tone prevailed, and prices were generally maintained at former levels. There was a fairly active inquiry, though such sales as were reported were generally limited to moderate quantities.

COD.—The local market retained a steady tone, and former quotations remained in effect. There was no change in the character of reports from Newfoundland in regard to the production of cod oil, and the market there remained firm with the offernigs light. There was a fairly active inquiry here, and sales were noted at 60c. to 61c. per gallon in cooperage.

MENHADEN.—Crude was firmer, influenced by some increase recently in the volume of inquiries received, and also by the unfavorable character of reports in regard to fishing operations. Sales were reported during the week of about 2,000 barrels at 42½c. per gallon in tanks f.o.b. factory, showing an advance as compared with the last previous sales of 2½c. There were no new developments in the refined situation, the market being steady at 62c. to 65c. per gallon for light pressed with a fair demand.

BALTIMORE, Sept. 13, 1923.

Quotations on fish oil stiffened during the last week and some sales of Chesapeake Bay stocks were made at 42½c. per gallon delivered at owners' tank cars in Baltimore. The advance tended to raise the expectations of the producers, some of whom are now holding out for 45c. per gallon. Sales of 400 barrels were reported, and it was said that other stocks up to 1,000 barrels could be disposed of. The production is still more or less restricted, the operations of the fishing fleet being attended with indifferent success, while the inquiry for oil appears to indicate an absorptive capacity well up to, if not ahead of, the supply. Some of the factories, in fact, still have orders in hand to fill.

SPERM.—A somewhat better inquiry was noted in a jobbing way, and the

(Continued on page 86)

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Drugs and Fine Chemicals

Denatured Alcohol Higher—Caffeine Alkaloid Raised to Allow Profits—Makers Put Hydroquinone Up

The principal price development in the drug and fine chemical market during the past week was the advance in all grades of denatured alcohol. This rise had been anticipated as the leading producers, but a short time back gave warning of higher prices due to expanding demand on the part of the consuming trades. The production at present is barely sufficient to take care of known needs.

Another development of interest was the rise in hydroquinone. This came without warning, and was said to have resulted from a decrease in the violent competition that some time back drove prices below a profitable selling level. Since then there has been a move afoot to bring values back to a profit making basis.

Late in the previous week an advance in caffeine was announced by the leading producers, a movement almost instantly followed by the majority of makers. However, the movement was not general until late last week when a Western producer raised prices, thus bringing the entire market to a common level. The rise was due directly to the fact that no money had been made at former prices; this was an effort to get a satisfactory financial return.

There were many minor developments. Cuttlefish bone was shaded again, and there seemed to be considerable weakness in the market. Formaldehyde was in some request from the coast, but on the whole, the market was under pressure at the lower prices recently named. Powdered Chinese cantharides advanced under excellent demand; Russian was unchanged.

Antipyrene was as highly competitive as ever, and business was accepted by large factors at sharp concessions from the previously named prices. Quicksilver advanced in London, but there was not only no sympathetic movement here, but, in fact, prices actually declined a bit. However, there was a firmer feeling around, and less desire to press sales at the expense of prices when round lots were considered.

Santonin in small quantities appeared in the market at prices much lower than obtained just prior to the appointment of a new selling agent with sole rights throughout the world.

However, no representative stocks have been accumulated here as yet, and will not be for some time to come.

Price changes made during the week are tabulated next below:—

Advanced

Alcohol, denatured, 2c.
Caffeine alkaloid, 40c.
Cantharides, Chinese, powdered, 7c.
Glycerin, dynamite, ½c.
Hydroquinone, 15c.

Declined

Antipyrene, 15c.
Cuttlefish, 1½c.
Menthol, 50c.
Quicksilver, 50c.
Venice turpentine, true, 1c.

Index Number—35 Drugs and Fine Chemicals

The following index numbers have been compiled from 35 representative drugs and fine chemicals. The normal index number is predicated on the prices as of August 1, 1914:—

Normal—136

Last week.	Prev. week.	Last month.	Last year.
208.6	208.5	184.8	156

ACETANILIDE.—Prices were unchanged but steady at 32c. to 33c. per pound, as named by producers. Occasional lots came out of resale hands at 31c. per pound, but the quantities offered were not sufficient to upset the local market.

ACETPHENETIDIN.—The maker of this material reported a steady market without important developments. Prices were retained on the basis of $1.85 to $1.90 per pound.

ACETONE.—This material continued to be in wide demand on contract, although there was perhaps a bit of a falling off in the requirements for prompt delivery. Quotations were firm at 25c. per pound in carlots and 25½c. per pound for l.c.l. business. Both quotations were f.o.b. works.

ACETONE OIL.—Prices held firm under good demand, and moderate offerings for prompt delivery quotations were noted steady at $1.10 to $1.15 per gallon f.o.b. works.

AGAR AGAR.—The market has retained a firm undertone due to the lack of positive and informative advices from Japan. Quotations were retained at $1.85 to $1.90 per pound on spot, although it was said that some business was booked at $1.80 per pound during the week. As the primary market had been very strong prior to the 'quake, there was every reason to suppose that the strong undertone would continue.

ALCOHOL.—See page 53.

ALOIN.—So firm is the raw material market that an advance in this product seemed to be almost certain to many dealers. Producers are faced by conditions that indicate a rising cost of gum aloes in Curacao, and this is expected to force higher levels in aloin. Quotations remained firm at 87c. per pound.

AMYL ACETATE.—Demand held consistently strong and supplies appeared to be limited. Quotations were noted at $4.50 to $4.75 per gallon.

ANTIPYRENE.—Competition has again forced lower prices. Transactions were put through on the basis of $2.35 to $2.50 per pound, according to seller, and dealers were in active competition for further business at the inside figure.

ASPIRIN.—The market was steady, with demand showing some improvement. Resale stuff was noted at 72½c. to 73c.; makers, 75c. to 80c. per pound.

BAY RUM.—Supplies were ample to meet a fair demand and the market appeared to be a bit dull on the basis of $2.75 to $2.85 per gallon for imported and $1 to $1.15 per gallon for domestic material.

BISMUTH.—Requirements of consumers appeared to be not in excess of jobbing limits, but, due to the good volume of total business, prices were maintained as follows:—Subnitrate, powder, $2.90 to $2.95; subcarbonate, U.S.P., $3.40 to $3.45; subgallate, $2.80 to $2.85; subiodide, $2.70 to $2.75 per pound.

BROMIDES.—Undertone were very firm. The cost to import goods remained high, and this served to make local holdings more valuable, as it is alleged that they cannot be replaced to be sold at present quotations on imported goods. Prices were as follows: —Potash, 16c. to 19c.; soda, 21c. to 22c.; ammonium, 19c. to 20c. per pound. Domestic producers continued to quote as follows:—Potash, 26c. to 27c.; soda, 24c. to 25c.; ammonium, 32c. to 33c. per pound.

CASTOR OIL.—Demand has freshened a bit, and a better feeling prevailed in the local market. Orders were more frequent, and the quantities involved were somewhat larger than of recent date. Prices were:—Medicinal, barrels, 13½c.; cases, 14½c.; No. 3, barrels, 13c.; cases, 14c. per pound.

CHICAGO, Sept. 12, 1923.

The castor oil demand has shown a great improvement, and as the local supplies are small, there is a considerable effort made to fill orders. Quite a number of contracts are being reported for supplies through the late winter. It is generally the case that, owing to the active demand for the No. 1 grade during the winter season from the drug trade, the winter prices are higher than during the summer season, and several large users have placed their contracts for the period ending along about March 1 next. The present demand is for the No. 1 grade chiefly. Present prices for less than car lots in returnable drums have not been changed up to this writing, although some advance is said to be likely, as contracts for considerable amounts have been made at very nearly the drum lot price. These prices in drums are still 14¼c. for No. 1 and 13¾c. for the No. 2. In car lots the price is 13½c to 14c. and 13¼c. to 13½c., respectively.

SEATTLE, Wash., Sept. 8, 1923.

The No. 3 grade castor oil is still offering at 10c. to 10¼c. on c.i.f. lots, with no spot available on which to base trading. There was no activity during the week.

CAFFEINE.—The advance in this article has been made general. Up to a late hour last week, a Western maker continued to name $3.60 per pound, but ultimately advanced to the general level of $4 to $4.25 per pound.

CANTHARIDES.—Powdered Chinese flies advanced to $1.25 per pound. Whole remained at $1 per pound. Russian goods were unchanged at $1.45 to $1.75 per pound.

CHLOROFORM.—Consuming needs were routine, and the market held steady at 32c. per pound for technical and 35c. per pound for U.S.P. Resale

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 4; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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stuff continued to be offered at 31c. per pound.

CITRATES.—Prices held unchanged but steady as follows:—Potash, 65c. to 67c.; soda, U.S.P. VIII, 55c. to 57c.; U.S.P. IX, 62c. to 64c. per pound.

CODLIVER OIL.—Quotations remained at $24 to $25.50 per barrel, but there was considerable competition in the market, due to lack of orders, and price shading was a feature on such business as was booked. The Norwegian market remained steady and unchanged.

ALCOHOL.—Makers of denatured alcohol advanced prices 2c. last week. The advance was due to the steady expansion in demand and came despite the fact that the cost of the principal denaturant is now materially lower than it recently was. There is every prospect of good business over the balance of the year. The advance bore out the predictions recently made by the leading producers.

The following quotations provide a fair view of values prevailing for car lots. Jobbing quantities of from one to five barrels may occasionally be picked up from dealers at slight concessions in prices:—Ethyl, cologne spirits, $4.77 to $4.87; 188 proof, barrels, $4.69 to $4.79; 190 proof, barrels, $4.74 to $4.84; Methyl, see Methanol; denatured, special No. 1, 190 proof, barrels, 45½c. to 47½c.; drums, 39½c. to 41½c.; completely No. 1, 188 proof, barrels, 47½c. to 49½c.; drums, 41½c. to 43½c.; No. 5, 188 proof, 44½c. to 46½c.; drums, 38½c. to 40½c.; No. 6, 188 proof, barrels, 43½c. to 45½c.; drums, 37½c. to 39½c. per gallon. Drums are charged at $6, returnable for full credit.

COUMARIN.—A fair business came to the spot, but on the whole, the market was quiet but steady at $4.50 to $4.75 per pound named by makers. Outside competition made resales possible at $4.35 to $4.40 per pound.

CREAM OF TARTAR.—Not much was doing in this article. Prices named by the domestic producers were apparently fairly firm at 26c. per pound. Orders with them are fair. Imported goods were noted at 24¾c. to 25¼c. per pound, according to seller, quality and quantity.

CUTTLEFISH.—This article was again reduced, ending the week on the basis of 15c. to 16c. per pound with demand light and stocks of good size moving very slowly into consumption.

EPSOM SALT.—This material was weak owing to a lack of sustained buying. Orders are occasional and the quantities involved are not sufficient to support the market easily. Undertones seemed weak. The close was:—Imported, technical, $1.10 to $1.15; U.S.P., $1.75 to $2; domestic, technical, $1.80 to $2; U.S.P., $2.15 to $2.40 per pound.

FORMALDEHYDE.—Demand has not freshened much, although there has been some inquiry in the market for export from the Pacific Coast. Makers quoted at 12½c. to 13c. per pound, as to quantity, and resale stuff was mentioned at 12c. to 12½c. per pound.

GLYCERIN.—The past week was quiet until late in the period when several transactions in dynamite took place at 16½c. per pound in the East and 16⅝c. per pound in the Middle West. This business was done on account of powder interests who are said to be seeking further supplies. However, holders have raised their views to 17c. per pound.

For saponification, 12c. to 12¼c. per pound is wanted, but buyers show no disposition to exceed 12c. per pound. Soaplye was priced at 11c. per pound, but refiners declared that they cannot pay that figure owing to the low prices prevailing on C.P.

In chemically pure glycerin, the market is heavily competitive, and while attempt is made to get more than 17c. per pound in drums, it is not successful in the main.

CHICAGO, Sept. 12, 1923.

There has been a considerable improvement in the demand for dynamite glycerin, and as supplies are limited prices have been advanced, and now favor sellers. Sales of dynamite glycerin are reported at 16¼c., and holders are asking 16½c. to 17c. at the producing points. For C.P. glycerin the inquiry is less active and the quotations are 16½c. to 17c. from holders in car lots and 17c. to 17½c. for drum lots. Saponification is held at 12¼c. and crude at 11c. The demand is chiefly at present for dynamite, but the market has a strong tone.

GUAIACOL.—Demand was broader. There was some interest displayed in supplies to cover the early winter months and sales increased a bit.

Carbonate was very steady at $5 per pound, offerings being light. Liquid was quoted at $2.35 to $2.60 per pound; crystals, $3.50 to $3.90 per pound.

HEXAMETHYLENETETRAMINE.—Imported was quoted 70c. to 72c.; domestic, 95c. to $1 per pound. Demand was light for the imported, and no better than fair for the domestic article, which differs materially from the imported variety, and hence finds a market despite the wide difference in prices.

HYDROQUINONE. — Makers advanced to $1.40 per pound, due to the larger demand and a less violent competition among factors.

IODIDES.—Crude has remained very steady at $3.97 to $4.06 per pound, and the preparations displayed a similar strain. Demand was good. There was a steady movement of supplies into consumption in anticipation of early winter needs, and hence the market was firm. The following quotations on the principal iodides prevailed at the close:—Potash, $3.75 to $3.80; soda, $4.25 to $4.30; mercury, green and yellow, $4 to $4.05 per pound.

METHANOL. — Demand remained sluggish in the extreme at the new and lower schedule put into effect during the previous week. Most consumers refused to entertain even the lower schedule for the time being at least, but producers expect to see trading stimulated at the more attractive prices.

Quotations were: — 95 per cent., drums, 95c. to $1; barrels, $1.05; 97 per cent., drums, 97c. to $1.02; barrels, $1.07; purified, tank cars, $1; drums, $1.05 to $1.10; barrels, $1.15 per gallon.

MENTHOL.—The market settled back into something like dullness. There was a pronounced falling away of inquiry and a material reduction in the amount actually sold into consumption. Prices as prevailing on actual sales were noted at $16.50 to $17 per pound. London declined to 75s. per pound. A large measure of the stimulation given the market by the Japanese earthquake worked itself out. A period of waiting was in force. Importers and consumers alike were inclined to await definite information as to what happened to the Yokohama stocks before committing themselves to further enlargement on the present quiet situation. It is believed that, if the aforesaid stocks were wiped out, a very strong situation will rest in the hands of the Kobe operators.

METHYL ACETONE.—Due to an error in information, a decline in this article was announced last week. No decline was made and producers of this material declared last week that it was in very firm position on the basis of $1.15 per gallon in tank cars, and $1.20 per gallon in drums. Spot offerings are light and prompt deliveries are filled with difficulty.

MERCURIALS.—Mercurials were all firm and it would appear that prices will hold unless the foreign situation as to quicksilver undergoes further weakness. Recently London has displayed a firmer undertone following small advances. Demand for mercurials in this market was fair last week. The usual amount of jobbing inquiries were in the market in addition to several inquiries for larger quantities. Prices noted in this market were as follows:—Calomel, $1.25; white precipitate, $1.49 to $1.54; red precipitate, $1.38; blue mass, 62c. to 64c.; ointment, one-third, 59½c. per pound.

OPIUM.—The market remained at $8 to $9 per pound in cases, according to seller. The seller recently advancing the price still remains at the outside figure, but the balance of spot dealers have not followed. However, there is no questioning the fact that the primary markets are much firmer and a bit higher.

PODOPHYLLIN.—The market is considered to be $6 to $6.50 per pound, according to seller, with a very strong situation prevailing, due to the high prices being paid for mandrake root. In one brokerage quarter a quantity was said to be in hand at $5.65 per pound.

QUICKSILVER.—Local prices were a bit lower at $60.50 per flask, but foreign markets showed a firmer trend and London actually advanced. This affected the spot somewhat and resulted in a bit less pressure to sell on the part of those a bit long of the market. London advanced from £8 10s. per flask to £8 15s. per flask.

QUININE.—Demand for quinine has been excellent, especially from those using bisulphate as a denaturant for alcohol. Some liberal purchases have been made on spot on such accounts as well as between dealers. Supplies of sulphate in the local market are adequate to take care of all demand. Prices on domestic material were basic at 50c. per ounce. Dutch was quoted 50c. too. Japanese was basic at 50c. per ounce with brokers offering at 48½c. per ounce. Offerings of unlabeled German sulphate continued to be received. Further quantities are floating to the spot and more is proposed for shipment.

ROCHELLE SALT. — The market was steady but quiet and without price change. Makers named 21c.; imported, 20c. per pound, and both refused to shade.

SALICYLATES.—Methyl was noted at 45c. per pound in drums and 47c. per pound in tins, but the resale market offered tinned material at 45c. per pound, thus establishing a price 2c. under the producers' views. Soda was noted at 40c. to 45c. per pound; salol, 80c. to 85c. per pound. Competition was keen between producing interests, but for the time being the declining movement has been checked.

SANTONIN.—Odd spot lots were offerng here around $150 per pound, but there is no regular supply as yet in the hands of the new representative

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SILVER NITRATE.—There was no net change in this article, prices fluctuating fractionally, but returning to 43⅝c. to 44⅝c. per ounce at a late hour in the week.

TERPINHYDRATE.—Prices held without change at 60c. to 62c. per pound, with a steady but not particularly active demand from the consuming trade. For a complete report on raw material, see Naval Stores.

VENICE TURPENTINE.—True material was cheaper at 17c. to 18c. per pound, due to a slight accumulation of supplies, and the desire on the part of certain holders to stimulate business.

Federal Wholesale Druggists Hold Convention in Toronto

TORONTO, Ont., Sept. 10, 1923.

The annual meeting of the Federal Wholesale Druggists' Association, which embraces the co-operative wholesaling corporations throughout the United States and Canada, was held here last Tuesday, Wednesday and Thursday at the King Edward Hotel and attracted a large attendance. Delegations were present from twenty-four of the twenty-eight member firms. The deliberations covered a wide range of such topics as the "Return Evil and How to Meet It," "Uniform Statistics," "Development of the Sundry Business," "Collection of Accounts" and "Loyalty and Co-operation of Employes." Some legislative matters were also considered and ideas on prevailing methods were exchanged.

Reports of officers and standing committees showed the association to be growing in membership and influence, and to occupy a strong financial position. From the report of the president it appeared that the volume of business done during the first six months of the current year exceeded that for the corresponding period of 1922 by 17½ per cent., while the gain in customers for the same period was 20 per cent., bringing the total up to a little under 15,000 of the approximately 60,000 retail druggists in the United States and Canada.

Officers were elected as follows:—President, W. A. Hargreaves, Drug Trading Co., Toronto; vice-president, Robert Sherwin, New Jersey Wholesale Drug Co., Newark; treasurer, O. J. Cloughley, St. Louis Wholesale Drug Co., St. Louis; secretary, R. E. Lee Williamson, Calvert Drug Co., Baltimore; executive committee, J. H. Marshall, Northwestern Drug Co., Minneapolis; O. J. Thuma, Economy Drug Co., Cincinnati, and J. J. Ereyer, New Jersey Wholesale Drug Co., Newark.

Invitations were received from Newark, Minneapolis and St. Louis to hold next year's session there. The selection will be made later by the Executive Committee.

At the banquet Thursday speeches were delivered by W. C. Reinhold, Chicago; J. C. Krieger, Buffalo, N. Y.; W. A. Hargreaves, Paul Pearson, Washington, and O. W. Osterlund, Philadelphia.

The members of the Toronto organization were unremitting in their efforts to make the stay of the visiting co-operatives agreeable and profitable, and they had provided plenty of amusement, through their local committee, of which Mr. Hargreaves was the chairman, being assisted by W. H. Worden, A. E. Walton, W. H. Andrews and Vernon Meeks.

Trade News Briefs

David A. Lacy, of the D. A. Lacy Co., cottonseed products, Dallas, Tex., has been elected an associate member of the New York Produce Exchange.

Dr. Edgar F. Smith, a former president of the American Chemical Society, and provost-emeritus of the University of Pennsylvania, has been made an officer of the Legion of Honor by France.

The new building of the Ashland Drug Co., Ashland, Ky., which is taking over the business of the Patton Bros. Drug Co., Catlettsburg, Ky., is expected to be ready for occupancy October 1.

The E. M. Sergeant Co., chemicals, clays and wood pulp, this city, has just issued a new booklet listing the chemicals and raw materials handled by the concern, which will be mailed to interested inquirers.

Fred S. Andrews, of Davis Bros., wholesale druggists, Denver, was among 70 Denver merchants and manufacturers who enjoyed a week's tour of western Colorado by train, the first part of the month.

Joseph Cartines was arrested in Denver recently after cocaine and morphine were found on his person. Federal officers say that he brings the narcotics from Mexico, and they have been after him for some time.

A new glass factory at Constantza, Rumania, which, when completed, will have 14 ovens, has been started, according to the report of Vice-Consul Richard B. Haven, from Constantza to the Department of Commerce.

Joseph D. Burge, vice-president of the Peaslee-Gaulbert Co., has returned to Louisville after a vacation spent in Detroit and Chicago. Stuart Duncan, another vice-president of the company, is back from a vacation spent at Wequetonsing, Mich.

The Quality Paint Manufacturing Co. has recently opened a manufacturing plant on Marietta street, Atlanta, The company will manufacture all kinds of house paints, industrial paints and enamels of good grade. Modern machinery has been installed.

Sulphur fields can be found in the Mexican states of Coahuila, Colima, Chiapas, Chihuahua, Durango, Guanajuato, Guerrero, Hidalgo, Jalisco, Mexico, Michoacan, Oxaca, Puebla, Queretaro, S. L. Potosi, Sonora, Tamaulipas, Vera Cruz and Zacatecas and in the territory of Lower California.

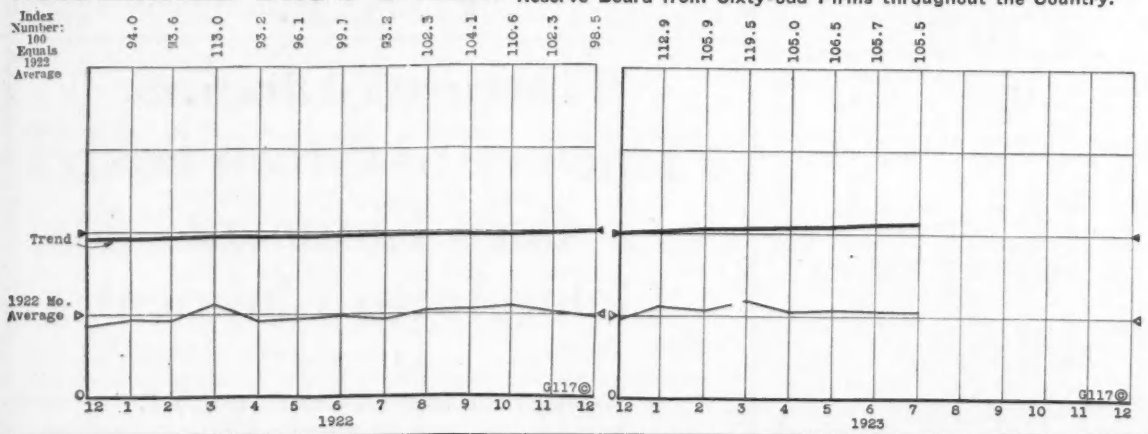
Paint fumes are blamed by the county medical examiner for the death of John Rousos at Oak Bluffs, Mass., on Martha's Vineyard Island. The man was found dead at the Pawnee House in a boiler which he had been engaged to clean and paint on the inside.

The Southern Agricultural Chemical Co. will be operating its large fertilizer plants in Atlanta and Cincinnati in about 30 days. These plants are subsidiaries of the Tennessee Copper Co., and are to use some of the sulphuric acid by-product of the copper company.

A special committee has been appointed by President D. C. Hull of the Southern Agricultural Workers' Association to investigate and make report on the various authentic tests made this year of various methods of boll weevil control. This committee consists of J. W. Fox, Scott's Station, Miss.; B. W. Kilgore, Raleigh, N. C., and W. E. Hines, Auburn, Ala. Report will be made at the annual meeting of the association next February, the time and place of meeting yet to be set.

WHOLESALE DRUG SALES:

Based on data representing total value, collected by Federal Reserve Board from Sixty-odd Firms throughout the Country.



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Botanical Drugs

Advances on Domestic Crudes Feature Strong Market—High Country Prices Force Rise—Stocks Light Here

Price trends in the botanical drug market last week were decidedly stronger. This was principally true as concerned domestic botanicals, although there was a degree of firmness noted in foreign drugs as well. It cannot be said that demand was much better, but the slight gain in the volume of business was sufficient to send local values to higher levels in many instances.

It has been declared recently that some dealers are undersupplied with American crudes, having failed to purchase much beyond the sales immediately in sight because of the high prices demanded by country collectors; also that such dealers were buying on spot whenever possible to do so to advantage, thus relieving the primary market of buying pressure.

This was clearly demonstrated last week on spot. One house had to buy several lots of various American botanicals and tried to cover the same here. The attempt revealed the fact that whereas quotations existed on the needed supplies, it was hard to put through firm orders at the quoted prices, and when the firm orders came along prices had a way of working up. Further, when quoted prices were confirmed, the quantity of material offered was in many instances insignificant.

This situation confirmed to a degree the strong situation that exists irrespective of the lack of large and expanding demand on the part of consumers. Further, the absence of such business has yet to weaken country holders. Along this latter line the failure of Southern collectors to issue their regular lists, showing quantities offered and prices wanted, is considered significant. When they want business these lists appear often. They are not soliciting business now, but are merely taking such as does come in when the buyer will pay the prices asked. This applies to both large and small collectors.

Among the important turns of trade last week was the strong situation in elm bark when an attempt was made to buy select, grinding and powdered material. Prices advanced sharply. Cascara bark was similarly placed when a large export order appeared. Wahoo was moved up briskly on attempts to cover here. Princess pine advanced when some actual spot supplies were available to meet a good demand.

Cohosh, blue and black, was stronger, with prices up on much smaller supplies. Skunk cabbage and spikenard root were so lightly supplied that the sale of a few pounds resulted in higher prices being named. Stillingia was also up. Aletris advanced, but helonias remained without change. Culvers moved forward again, with mighty little available here. The same was true of mandrake.

In addition to the above, especially strong positions were held by beth, blood, cranesbill and wild yam roots. Prices did not advance on these articles, but the inside levels were distinctly liable to prompt advance, as for the most part they were named by but a single holder.

Price changes made since the previous report are tabulated next below:—

Advanced

Aletris root, 5c.
Balsam tolu, 25c.
Barberry, bark of tree, 2c.
Black haw, bark of tree, 2c.
Blood root, 1c.
Cloves, Zanzibar, ½c.
Cascara sagrada bark, 3c.
Clover tops, red, 4c.
Cohosh root, black, 1c.
blue, 3c.
Culvers root, 2c.
Celery seed, 1½c.
Canary seed, Morocco, ½c.
Caraway seed, Dutch, 1¾c.
Conium seed, 1c.
Elm bark, selected, 3c.
powdered, 2c.
Dill seed, natural, ½c.
Galangal root, ½c.
Manna, flake, small, 2c.
Mandrake root, 3c.
Peppers, black, Aleppy, ½c.
Lampong, ¾c.
Tellicherry, ¼c.
white, Singapore, ½c.
Muntok, ¾c.
Prince's pine, 5c.
Quince seed, 15c.
Sassafras bark, select, 5c.
Skunk cabbage root, 2c.
Spikenard root, 2c.
Stillingia root, 1c.
Wahoo back of root, 10c.

Declined

Aconite leaves, 1c.
Borage flowers, 1c.
Balsam fir, Oregon, 15c.
Catnip leaves, 1c.
Cannabis, domestic, U.S.P., 3c.
wild, not tested, 5c.
Deer tongue leaves, ½c.
Doggrass root, cut, ½c.
Ergot, 10c.
Golden seal root, whole, 10c.
Jaborandi leaves, 2c.
Jalap root, powdered, 1c.
Mullein flowers, 75c.
Simarubra bark, ½c.

Index Number—40 Botanical Drugs

The following index numbers have been compiled from 40 representative botanical drugs—20 foreign and 20 domestic. The normal index number is predicated on prices as of August 1, 1914:—

Normal—60			
Last week.	Prev. week.	Last month.	Last year.
123.4	123.3	123.3	108

ARECA NUTS.—The market was quiet, with supplies fairly well distributed and held on the basis of 9c. to 10c. per pound by most dealers.

ERGOT.—Prices in Spain were around 25c. per pound for shipment in bond. On spot, goods were offering sharply lower at 40c. to 41c. per pound, while goods to arrive were held nominally at 43c. per pound, with little call.

IRISH MOSS.—Prices on bleached moss varied as to quality. Some sellers asked 14c. per pound minimum; others wanted all the way from 7c. to 9c. per pound. Ordinary was noted at 5½c. to 7c. per pound. It was alleged that no genuine bleached moss was to be had under 9c. per pound, due to the import cost.

MANNA.—Small flake advanced to 28c. to 30c. per pound, with a pronounced tendency to ask 30c. minimum. Higher prices came in from Italy, and 32c. per pound was minimum and as high as 40c. was asked.

QUASSIA CHIPS.—The minimum price was 7c. per pound, at which figure there was one holder; others wanted 7½c. per pound. Demand was quiet, but the replacement market was so firm as to warrant a better undertone on spot.

Balsams

COPAIBA.—Small sales predominated in a quiet market, and prices held without change on the following basis:—South American, 27c. to 28c.; Para, 23c. to 24c. per pound.

FIR.—Oregon balsam was weaker, due to lack of demand. Recent shortage has been relieved, and sellers now appear to be a bit more anxious to find buyers. Prices were noted lower at $2.60 to $2.70 per gallon, which is still high in comparison with normal values. Canadian was noted at $12.80 to $13 per gallon.

PERU.—Quiet undertone prevailed in a market subject to routine demand. Quotations were noted on the basis of $1.75 to $1.80 per pound.

TOLU—Only the smallest kind of stocks are available and the market stands nominal and higher at $2.25 per pound. A small quantity of the material is understood to be afloat, but it is expected that it will all be sold prior to arrival

Barks

BARBERRY.—Bark of tree has been advanced to 12c. to 13c. per pound due to the high costs of new crop. Bark of root was unchanged at 20c. to 25c. per pound, but appeared to be very firm.

BLACK HAW.—Prices showed a pronounced upward trend due principally to the fact that but little is held here. Bark of root was quoted 40c. to 45c.; bark of tree was higher at 28c. to 29c. per pound. The country position was strong.

CASCARA SAGRADA.—Export inquiry was frequently met last week. One of the largest export houses had orders in hand for about 3 tons. The market was found to be higher with new peel poorly stocked and quoted strong at 18c. per pound. Old peel also looked up and was noted at 19c. to 20c. per pound. The coast was reported strong, offering little, and showing no disposition to force sales. A large factor predicts 25c. bark.

CINCHONA.—There was one spot dealer with broken goods about U.S.P. in test for which 23c. per pound was wanted. For goods of high test, this factor named 25c. per pound. Other quarters quoted 24c. to 28c. per pound, according to dealer and test. The cost to import at this writing is no lower than 23c. per pound, and some dealers have been quoted 23c. to 25c. per pound for forward goods.

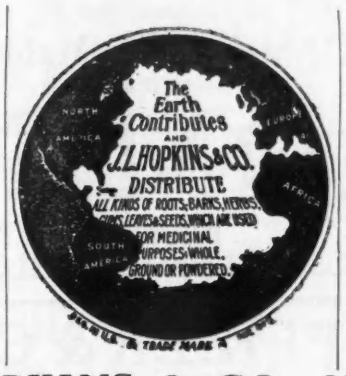
ELM.—The situation in selected bark has tightened. Attempts to buy in the country have revealed a small collection and even smaller offerings. Prices have been advanced stiffly, and on spot a similar movement has placed the market inside at 28c. to 30c. per pound. Practically no grinding bark was quoted save by one dealer who named 14c. per pound—a price which

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 5; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

STANDARDIZED
CRUDE DRUGS

Aconite Root
Aloes
Belladonna
Benzoin Gum
Buchu Leaves
Cinchona Bark
Cardamom Seed
Colchicum
Damiana Leaves
Digitalis Leaves
Ergot
Euphorbia Pil.
Fennel Seed
Gentian Root
Ginger Root
Henbane
Helonias



Ipecac
Jalap Root
Jaborandi Leaves
Kava Kava
Nux Vomica
Orris Root
Orange Peel
Papain
Quince Seed Cape
Rhubarb Root
Sassafras Bark
Senna
Stillingia Root
Tonga Root
Tragacanth Gum
Uva Ursi Leaves
Valerian Root
Wild Cherry Bark

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Cinchona Bark Red Ground
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Colchicum Root
Colchicum Seed
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Cuttle Bone Jewelers
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Dragon's Blood Ex. Pwd.
Dutch Madder
Guarana
Guarana Powd.
Gum Benzoin Powd.
Gum Euphorbium
Gum Euphorbium Powd.
Gum Galbanum
Gum Gamboge Powd.
Gum Guaiac Powd.
Gum Myrrh Powd.
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others declared prevailed as minimum in the country. Powder was hard to get spot, and a literal interpretation of that term would mean that the buyer would pay 25c. per pound. One large house cannot offer for the next 30 days, having sold a round quantity that will take its entire production. Goods due in from 10 days to two weeks were named at 21c. to 23c. for a spot delivery, and 18c. at a Midwestern city.

SASSAFRAS.—Selected bark has advanced to a minimum of 25c. to 28c. per pound, as to dealer and quality. All houses are agreed on 28c. per pound as the price for genuine selected bark, but a quality known to brokers as a fair select was named at 25c. Ordinary bark was quoted at 14c. to 18c. per pound. The country prices were strongly maintained, and stocks were light there.

WAHOO.—Bark of root burst away from a static position last week, and on attempts to buy it was found that nothing was available under 90c. per pound, and not all dealers could offer. The country was very stiff in its views, and generally had little to offer. Bark of tree was noted at 40c. to 45c. per pound.

WHITE PINE.—Rossed bark in one quarter was named at 7½c. per pound. Others wanted 8c. to 9c. per pound, as to seller, and were firm for those prices.

Beans

CALABAR.—Sales were confined to jobbing needs, and the market closed unchanged at 13c. to 14c. per pound.

TONKA.—The market was steady at $2 to $2.10 per pound for Angostura beans and there was a fair demand for the article. The larger buyers were quiet for the moment, but no weakness in prices was anticipated as a result of that condition.

VANILLA.—All markets were strong Although demand here has been most conservative, the fact that consuming requirements are mostly in excess of supplies—when figured over the entire year—was sufficient to keep the market supported at previous prices. Supplies on spot are not large and while the volume of trade is not heavy, most sellers can see a market for their goods and are not inclined to push business at the expense of prices. Quotations on Mexicans stood at $9.50 to $11; Bourbons, $5 to $5.50 per pound.

Berries

CUBEB.—Perhaps the market was a bit steadier; at least no further declines took place. However, the situation still remained in buyers' favor and there seemed little hope for immediate improvement. Prices were noted as follows: Ordinary, 68c. to 70c.; XX, 70c. to 72c.; powdered, 78c. to 80c. per pound.

FISH.—Small business at unchanged prices prevailed and the market ended the week at 3c. to 4c. per pound.

JUNIPER.—Transactions were along routine lines that failed to take up much material save in a jobbing degree. Quotations remained at 3c. to 3½c. per pound.

Flowers

ARNICA.—Small sales continued to keep the market depressed at 7½c. to 8c. per pound. The inside price could be done only on large business under competition. The tendency was to ask 8c. per pound minimum on average sized orders.

BORAGE. — One quarter cut the price to 19c. per pound while others continued to name upwards of 22c. per pound, according to dealer. There was virtually no demand.

CLOVER.—Red clover tops were firm at the higher price of 23c. to 25c. per pound, and, according to the amount of stuff offered for replacement, the market was in strong position despite the fact that demand was light.

INSECT.—One prominent importing house advised the trade that it had received a delayed cable from Kobe offering 10 tons of flowers for shipment at 50c. per pound, c.i.f., New York. The offer was dated September 7, and was firm for two days. The delay in the cable rendered the price merely a quotation subject to confirmation. However, it is of interest to note that the same exporter, just prior to the earthquake, quoted 52c. per pound, while another prominent quarter named 54½c. per pound. Powder was advanced at 60c. to 62c.; powdered, with stems, 35c. to 40c. per pound. There was a bit of a firmer feeling due to the uncertainty of the Japanese and Dalmatian markets.

LAVENDER. — The market was strong, due to the scarcity of select flowers abroad due to short crop. Prices on spot were noted at 37c. to 45c. per pound as to holder. Ordinary flowers were quoted at 25c. to 30c. per pound.

MULLEIN.—Recently the market nominally was $2 per pound, a price quoted by a lone holder of a small quantity. Last week another seller came into the market with a spot supply and quoted $1.25 per pound.

SAFFRON.—The market was quiet but rather steady at $35 to $36 per pound for Valencia, and $1 to $1.10 per pound for American. There was not much demand.

Herbs and Leaves

ACONITE.—One quarter offered at 12c. per pound. The balance of the trade was spread between 13c. and 25c. per pound, with no two dealers in agreement as to price, nor was any clear explanation offered for the wide difference in views. There was not much demand.

BUCHU.—A sale of 1,000 pounds of this article confirmed the price of 90c. per pound, but some quarters felt the situation to be none too firm, due to the lack of buying interest. The primary market is about 3s. per pound, but now and again special offers come through at lower net values.

CATNIP.—New crop leaves are now in hand ,and the price for the moment has been named a bit lower at 26c. to 27c. per pound. There is a little bearish tendency in the market, however, and many look to see the quotation go back to its former position.

CANNABIS.—Cultivated U.S.P. cannabis was quoted at $1.40 per pound for a delivery now said to be reasonably prompt. As demand is lacking, sellers make that the market. Wild stuff not tested was also lower at 75c. per pound.

DEER TONGUE. — Quotations on new goods were shaded fractionally to 11c. to 12c. per pound, but the market was pretty steady at the new prices,

(*Continued on page 71*)

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Essential Oils

Caraway Scores Sharp Advance — Peppermint Strong at Higher Levels—Wormseed Slashed—Cassia Lower

Demand for essential oils was steady last week, but of routine character. For the most part, consumers were inclined to take only small quantities as needed. In no instance was there anything like a heavy buying movement.

Despite this sort of trading, prices were steady on the whole. Sellers were inclined to await the development of more urgent needs in the consuming trade and hence, with occasional exceptions, held values firm.

The strongest domestic oil was peppermint. Prices were held high in the country, and were advanced on spot. Still there was no buying to amount to anything, and all quarters held aloof to await further development of the new crop situation. Some believe that present prices will be succeeded by lower quotations when the new crop is in. There seemed to be little stock here. As to spearmint and erigeron oils, there were ample supplies, and the market was dormant.

Among the foreign materials, caraway oil led the van by a sharp advance abroad and on spot. Cables came in very high, due to the sharp advance in seed in Holland. Some weeks ago this movement had been forecast, but on spot few were inclined to credit the statements of the Dutch producers. Replacement values are now about $3 higher than they were a few weeks ago.

Citrous oils were all weak, although no further changes in prices were noted. There is an almost total lack of demand on spot, and this naturally reduced interest in offerings from primary market points. The latter show a tendency toward further weakness.

Citronella oil was unchanged, and presumably subject to considerable competition for the small demand current. However, this weakness is more apparent than real, as local supplies are very moderate, and the primary source of supply shows a strong undertone, due to a conservative crop. Higher prices are looked for. Clove oil was lower, and subject to local competition that kept values slightly out of line with the strong situation prevailing in spice. Crop news on the latter is distinctly unfavorable at this writing.

Sassafras oil was a mighty scarce article. An advance was scored when demand broadened, and the spot was found to be undersupplied with prompt delivery oil. Further, the country was able to offer but minimum quantities. Continued demand would cause further rise in prices, it was said.

Such were the important developments in the market last week. Price changes are tabulated below:—

Advanced

Caraway, $1
Peppermint, natural, 10c.
Sassafras, natural, 10c.
Vetivert, Bourbon, 50c.
rectified, 15c.

Declined

Cassia, redistilled, 5c. Clove, 5c.

Index Numbers—20 Essential Oils

The following index numbers have been compiled from twenty representative essential oils. They indicate the general siutation in the market. The normal index number is predicated on prices as of August 1, 1914:—

Normal—190

Last week	Prev. week.	Last month.	Last year.
251.2	254.4	258.3	249.2

ANISE.—The market was weak owing to large supplies and little demand. Prices remained at former positions, but were subject to change under competition. They were:—Native, 45c. to 47c.; lead free, 48c. to 50c. per pound.

BERGAMOT.—The local market was quiet but steady at $2.60 to $3 per pound, according to seller and brand. The foreign price held up despite the lack of orders from this country.

BOIS DE ROSE.—Quotations were observed at $2.45 to $2.55 per pound under light demand. However, sellers were fairly firm in their views, pointing out the closeness of local values to the cost of replacements.

CARAWAY.—Cables received late in the week quoted shipment oil at $7 to $7.30 per pound, according to shipper. Local values were marked up to $7 to $7.25 per pound, and it was certain that very little could be had at the inside figure. Demand was absent in the main, but local supplies are so light that the absence of buying is without much effect.

CASSIA.—Prices in one quarter were offered on redistilled USP oil at $3.10 per pound, and, according to dealer and quantity, upwards of $3.25 per pound was asked. Not much could be had at $3.10, and most factors named $3.15 per pound as minimum. The primary market was very firm.

CEDAR.—Oil of leaf was firm at $1.05 to $1.15 per pound and offerings were conservative. So was demand. Several fair sized orders were sent to the country to be filled direct, as local supplies were inadequate. Wood oil was noted at 26c. to 28c. per pound.

CITRONELLA.—The local market is supplied with a minimum amount of material, and the least increase in consuming demand for spot goods would quickly strengthen the market. At present it shows a tendency to sag, owing to a lack of trading. Prices on Ceylon oil were noted at 68c. to 70c. per pound in drums. Java oil was strong at 85c. to 90c. per pound.

CLOVE.—Only keen competition on spot is keeping prices at the lower level of $2.05 to $2.10 per pound. The position of spice is strong in the primary market, and on spot as well. Nor does anything suggest that in the future production costs will be lowered by a decline in spice. A larger demand would affect prices, it was said.

ERIGERON.—The market was nominally 75c. to 90c. per pound, with demand non-existent. Still, some quarters on spot do not believe that new crop oil will result in prices going much lower.

HEMLOCK.—This article is now said to be fairly firm at $1.10 to $1.25 per pound as to quantity, and the supplies in hand are not sufficient to cause weakness because of the small amount of demand current at the moment. The country offers only limited amounts.

JUNIPER.—Demand is of strictly routine character and there is little interest displayed in the article save in a jobbing way. Prices held last week at $1.25 to $1.35 per pound for oil of berries.

LEMON.—The foreign market has looked up a trifle of late, but there is really little, if any, real change in the depressed conditions surrounding all points. Locally, there is the smallest kind of demand and no promise of improvement. The tendency is to move present stocks if possible, and hence price shading is liberally indulged in as a medium to stimulate reluctant purchasers. Prices were:—Italian, 70c. to 85c.; domestic, 75c. to 80c. per pound.

LIME.—No further decline was reported in expressed oil, the article holding at $1.50 to $1.65 per pound. However, the trend was downward and demand was light. Distilled was unchanged at 75c. to 80c. per pound.

MUSTARD.—Artificial oil is considered to be strong at $2.40 per pound, the price most houses named last week. However, one important factor indicated that in a large way he would do $2.25 per pound, but the business would have to be especially attractive to get the price.

ORANGE.—This article is now out of demand, the principal season of consumption being at an end. All markets display weakness. While local values were unchanged, conditions favored shading of quoted levels in the event of important covering of requirements. Italian oil was noted at $3.35 to $4; West Indian, $2.50 to $2.75; domestic, $3.15 to $3.25; distilled, domestic, $1.75 to $2 per pound.

PENNYROYAL.—Demand remained about unchanged and well up to recent volume. However, the primary market was firm to strong, with an upward trend noted in cabled information. Quotations on Spanish oil were inside at $1.90 to $2 per pound.

PEPPERMINT.—While demand is not important, the market has retained a firm undertone and prices have been moved up again. The following prevailed at the close:—Natural, $3.10 to $3.20; rectified, $3.40 to $3.65 per pound. Most request at this time is for rectified material, but on the whole consumers and dealers alike are sitting tight awaiting further development in the new crop situation. Coun-

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To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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"EX-ALK"—Odorless, Tasteless solvent for non-alcoholic Vanillin —Coumarin extracts

Established 1882
THE NORTHWESTERN CHEMICAL COMPANY
The Largest Makers of Butyric Ether in the World
WAUWATOSA WISCONSIN

try holders continued bullish, asking prices that for the most part buyers were not inclined to accept.

PETITGRAIN.—Local affairs were quiet enough but prices held firm, due to a strong situation prevailing at the source of supply. South American oil was priced at $1.70 to $1.75 per pound on spot.

SANDALWOOD.—There have been two different qualities of oil offered this market of late and hence prices have declined. Both are USP in quality but are widely different as to quality. Quotations stand at $7.35 to $7.65 per pound, and the inside prevails on what might be called a No. 2 grade of East Indian oil. Amyris was dull and unchanged at $3 to $3.25 per pound.

SASSAFRAS.—Natural oil is very hard to get at any price. Beginning the week at $1.15 per pound inside, selling was brisk and in a short time prices were up to a minimum of $1.25 per pound with but nominal amounts offered. It is almost impossible to get anything out of the country, hence the local and primary market strength. Artificial was unchanged at 40c. per pound in drums; safrol, 50c. to 55c. per pound.

TANSY.—The declining movement has stopped for the time being at least, but it cannot be said that the market is very well supported by buying on the basis of $4.50 to $4.75 per pound. Absence of request makes the market highly competitive.

TERPINEOL.—Prices were very firm at 52½c. to 55c. per pound with production sold fairly well ahead. Raw material advanced 7c. For a complete report on turpentine see Naval Stores.

VETIVERT.—Bourbon has advanced to a minimum of $6.50 to $7 per pound, according to seller and quantity. There has been an advance in the replacement costs which movement caused the local rise. The market closed firm under good request.

WORMWOOD.—Due to slow demand and plentiful supplies, quotations last week were slashed to $4.50 to $4.75 per pound.

Cox, Aspden & Fletcher Get Mysore Sandalwood Oil Agency

Cox, Aspden & Fletcher, 26 Cortlandt street, this city, has been appointed sole agent in this country for Essenflour Products, Ltd., essential oils, Mysore, India, which was recently made overseas agent for the sandalwood oil produced by the Mysore Government.

B. Sitaramachar, managing director of Essenflour Products, Inc., is at present in London, but expects to visit this country before his return to Mysore. He received a university training in India and served the Mysore Government twelve years, during six of which he was in charge of the government sandalwood oil plant, which he built under the direction of Sir Alfred Chatterton. In 1920 Mr. Sitaramachar retired from government service and organized the Mysore Development Syndicate, which is the parent concern of Essenflour Products, Ltd. He is also managing director of the Mysore Asbestos Products Co., Ltd., and has other extensive interests.

Fertilizer Materials

(*Continued from page* 48)

Chicago

CHICAGO, Sept. 12, 1923.

BLOOD.—The market for blood remains quiet, partly because of the high prices asked by producers, who are holding for $4.50 per unit of ammonia. Buyers are unwilling and they say unable to pay these prices, which practically reflect the rates which producers believe they will be able to secure for their product. Last sales reported were on the basis of $4.25 per unit. The higher prices for tankage are partly responsible for the higher prices asked for blood. The market is now quoted at $4 to $4.25, but little stock could be had at the latter figure at present.

TANKAGE MATERIAL.—There is some demand, but the light offerings tend to restrict business in digester tankage material. The nearby supplies were pretty well cleaned out by recent sales. Fancy grades reported sold at $4.50 and 10c. Chicago, these grades being practically suitable for meat scraps. The demand for fertilizer tankage material is light. The fall season has been a disappointing one in the sales of fertilizer, which have been far below expectations here. Prices quoted for tankage material are:—High-grade ground fertilizer stock, $3 to $3.25; high-grade ground feed stocks, $3.75 to $4; high-grade unground feed stock, $3.75 to $4; lower grade unground feed stock, $3.25 to $3.75; renderers' unground, $2.75 to $3.25; unground concentrated, $3.75 to $4.25; hoof meal, $3 to $3.15; liquid stick, $2.90 to $3; hair tankage, $2.25 to $2.75; garbage tankage, per ton, $6 to $6.50.

BONE MATERIALS.—In the market for bone materials there are offerings in plenty, but buyers are scarce. Bone meal continues neglected. There is some demand for jaws, skulls and knuckles at $33 to $35 a ton in qualities suitable for glue makers and at $35 to $37 a ton in the grades used for grinding by makers of chicken feed and the like. Junk bones are selling slowly, but are nominally priced at $25 per ton f. o. b. Chicago. Prices for bone materials are:—Ground steamed, $21 to $24; dry unground steamed, $17 to $20; raw bone meal, $26 to $30; cattle jaw, skull and knuckle, $33 to $37; Junk bones, $23 to $25; grinding hoofs, pigs' toes, waste horn material, $35 to $37.50.

CRACKLINGS.—Offerings through the middle West are scarce, but the supply is expected to improve as present contracts expire and the larger production comes on with the advent of the winter season. At present prices are firm at $67.50 to $72.50 for pork and $45 to $52.50 for beef scraps.

Seattle

SEATTLE, Wash., Sept. 8, 1923.

Trading was at a standstill and general interest is lacking in fish meal offering here during the past week, with the result that unchanged prices prevailed. Final figures were:—Herring meal, guaranteed 12½ per cent. ammonia and 10 per cent. bone phosphate lime, $60 per ton; dogfish meal, guaranteed 12½ per cent. ammonia and 10 per cent. bone phosphate lime, $70 per ton, and salmon meal, guaranteed 12 per cent ammonia and 10 per cent. bone phosphate lime, $58 to $60 per ton.

Gorgas Power Plant Sale or Removal O.K.'d by Daugherty

WASHINGTON, Sept. 14, 1923.

The Alabama Power Co. has granted Secretary of War Weeks an extension of time from September 14 to September 24 in which he can decide whether the War Department will remove the Gorgas power plant from the land of the power company or sell it to the company in accordance with its offer of $3,000,000 to $3,500,000. An extension was requested by Secretary Weeks until November 1, because of Henry Ford's offer and because the latter desired time to consider legal phases of the situation. The company has been sustained by Attorney General Daugherty in its demand that the plant be removed or sold to it by October 24.

The company notified the War Department April 24 to remove the plant unless it wanted to sell to the company, as the latter alleged it had a right to buy under the terms of the war contract for building the Gorgas plant. The six months' notice will expire October 24. If the government does not accept the company's offer or remove the plant by that time for its junk value, which is now believed to be a physical impossibility, it is claimed that the plant will become forfeit to the company.

It is pointed out that if Mr. Ford accepts Secretary Weeks' suggestion that the Gorgas plant be eliminated from the Ford offer the amount of the offer might be reduced by the amount the government would receive from the power company for the plant. The offer would then stand at $1,500,000 or $2,000,000 for the Muscle Shoals nitrate and steam plants, Wilson dam and power plant, Waco limestone quarry and other appurtenances. All these properties cost the government up to $106,000,000, according to some estimates, and the Ordnance Department estimates their scrap value as $18,000,000. It is doubted here that Henry Ford will accept the Secretary's suggestion.

The motives and methods of the Alabama Power Co. alleged to have hindered the Ford purchase have been attacked in a statement issued by Gray Silver of the American Farm Bureau.

G.S.Alexander & Co. Bankrupt

A petition in involuntary bankruptcy has been filed against G. S. Alexander & Co., Inc., brokers in fertilizer materials, 33 Rector street, this city, by F. G. Topliff on a claim of $28,933. An execution against the company was issuded a short time ago to satisfy a claim of $51,414 in a suit by Joan Didricksen (Norwegian Nitrogen Products Co.).

Assets of Alexander & Co. are stated to be about $20,000. No statement of liabilities has been made. It is understood that the Georgia firm of the same interests is not affected by the bankruptcy of the local organization.

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Gums and Waxes

Camphor Slabs Down—Rise in Brazilian Exchange Fails to Strengthen Carnauba—Japan Wax Steady—Shellac Firm

The gum and wax market was a very quiet affair last week. Excitement engendered by the Japanese earthquake passed off without leaving a situation likely to develop the advancing movements in camphor and Japan wax. For the most part the market returned to an almost dull condition in which routine business was booked in jobbing degree only. Prices in general were maintained.

In the gum market imported camphor underwent downward revision, due largely to the fact that important consuming interest failed to enter the market in support of the speculation that last week sent values up unduly. Toward the end of the week considerable selling pressure was evident.

Aloes were firm, and advices from Chicago were distinctly favorable to an advance in local prices. Attempts to buy direct in the primary market have been made there on the part of large consumers here, but for the most part the attempts have failed, save as the buyers were willing to accept price views dictated by Dutch bankers. There was a feeling that prices would advance, as buyers have already met sellers' ideas in purchasing the first 500 cases of the new crop.

In the wax market, conditions changed but little. Demand for beeswax showed a fair improvement, and the primary sources of supply were decidedly firm. In fact, the situation in Cuban wax was somewhat stronger, due to the fact that sellers in the Cuban market had but small parcels to offer. Prices were maintained in all grades.

Carnauba wax remained under depression. The short operations of one factor have succeeded in degenerating business in this article to a point where consumers as a whole are loath to take hold. There is no questioning the fact that the primary market is short stocked, or the fact that exchange has advanced about 10 per cent. Still, there remains a backwash of pessimism that suggests lower prices as likely. The primary market certainly is not cheaper. There also is no assurance that new crop wax will be ready by November. And yet, the mere fact that short selling at prices below the cost of importation has taken place, has driven the consuming buyer out of the market. Consumers give no thought to the fact that such short sales are averaged against transactions made at higher levels earlier in the season. It is barely possible that the short seller has got out without loss. However, that does not alter the fact that there is nothing current at this time suggestive of lower prices, while the advance in exchange is a bullish argument as to prices for the future.

Japan wax was quiet, the advance being maintained largely by reason of business between dealers and jobbers. Some quarters were inclined to favor the view that, as the Japanese end of affairs straightens out, prices on shipment parcels will effect a reduction in present quotations. However, no direct advices were reported received from Japan last week.

Shellac was firm on spot. The feature of trade was the beginning of competition from resellers, who shaded the market named by importers. However, for round lots, the importers' price prevailed in practically all instances. London declined, and Calcutta advanced. There was a firm feeling at the latter market, but not much business. Importers on spot felt bullish as to prices for the immediate future, and generally were of the belief that there is not much unsold or manufactured shellac in the hands of consumers, save for the larger talking machine record makers.

Advanced

Shellac, T. N., Calcutta, Sept., ¾c.

Spermaceti wax, cakes, 3c.

Declined

Camphor, imported, 3c.

Myrrh, 1c.

Shellac, T.N., London, Oct., ⅝c.

London, Dec., ⅝c.

Gums

ALOES.—Primary market advices continued to be strong in character. Representatives of some large consumers in this country are known to have been at the source of supply, offering to buy at low prices, but the situation there is now so strongly controlled by the Dutch bankers that bids below sellers' views are generally rejected. Reliable quarters on spot believe that before the year is out higher prices will prevail at all points. Quotations were:—Curacao, 8c. to 8½c.; Cape, 8½c. to 9c.; Socotrine, 30c. to 40c. per pound.

ARABIC.—Sales were light, but the market was perhaps a bit steadier and there was less disposition to drive prices below the present level of 13½c. to 14c. per pound for cleaned amber sorts. Stocks were plentiful, however, and demand will have to expand materially in order to stabilize conditions, it was said.

ASAFOETIDA.—The market assumed an easier undertone on the basis of lumps at 23c. to 24c., and 50c. to 52c. per pound for powder. These prices were unchanged, but there was considerable selling pressure in the market and the trend was downward.

BENZOIN.—The market was quiet to a marked degree. Sumatra was moved in a jobbing way only, and prices remained at 27c. to 30c. per pound, as to quantity. However, despite the slackness of trade, there was nothing to suggest that the prices could be shaded. Siam was noted at $1.25 to $1.35 per pound.

CAMPHOR.—Some of the smoke has cleared away from the market, and the upward trend in imported camphor has been given a set back if not entirely checked. Prices declined to 86c. per pound on sales of 100 cases. There was little disposition on the part of buyers to cover much material. Later 10 cases brought 87c. per pound. There was a feeling that ultimately the market may soften as Japan begins to offer again. Domestic makers reported business based on the following schedule:—Bulk, 93c.; blocks, 94¼c.; squares, 94½c.; tablets, 96¼c. to 99c. per pound. They do not anticipate any change in prices.

GALBANUM.—Sales were confined to immediate needs that proved to be very light last week. Prices were unchanged at 80c. to 85c. per pound.

GAMBOGE.—Quotations were noted at 95c. to 98c. per pound for mass and pipe; powdered, $1.08 to $1.15 per pound. Most of the orders received last week were for small quantities, and there was no disposition to go beyond immediate needs

KINO.—Several fair sized orders were filled owing to the article being again available after a period in which the spot was bare of supplies. But one lot is available, however, and that may not last long.

MYRRH.—One seller has shaded the market to 34c. per pound, but there has actually been no fundamental change on spot as concerned fundamental conditions. The market is steady on the whole with demand inclined to be of routine jobbing proportions.

OLIBANUM.—Prices were noted as follows:—Siftings, 8½c. to 9c.; tears, 11c. to 18c. per pound. There is some question about the quality of the goods offered at lowest prices. Some quarters assert that standard merchandise could hardly be sold at the quoted prices, due to the fact that replacement cost precludes it. However, the prices are offered by responsible sellers of repute and are said to represent standard grades.

Waxes

BAYBERRY.—Stocks are increasing and demand shows no growth. The market closed rather easy at 25c. to 30c. per pound.

BEES.—Undertones were very steady in all markets. There is a fair consumption afoot at the present time, and this keeps prices to a firm position. Foreign points report similar conditions, and from Cuba came the word last week that stocks there were light. Prices were as follows:—African, 22c. to 22½c.; Brazilian, 26c. to 26½c.; Chilean, 27½c. to 28c.; refined, 30c. to 32c. per pound.

CARNAUBA.—As far as selling this article was concerned, the market appeared to be flat. Most consumers showed pronounced disposition to hold aloof despite the fact that cabled ad-

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 6; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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vices do not encourage lower prices. Stocks in Brazil are believed to be light, and there is no certainty that new crop will be ready in November. However, with demand out of sight entirely, there is some disposition to force sales through price concessions. From reliable sources it was learned last week that offerings were in hand at 16¾c. per pound on chalky No. 3 and 17c. per pound on North Country No. 3. However, most importers ask 18c. per pound for these grades and refuse to openly cut that figure. No. 1 is named at 40c. to 42c.; No. 2 regular, 31c. to 33c.; No. 2 North Country, 21c. to 22c. per pound.

JAPAN.—Spot prices remained steady at 18c. to 19c. per pound, with an occasional holder asking 20c. per pound. No direct news has been had from Japan as to the effect of the 'quake on this article, and although sellers here hold to 18c. there are some who believe that prices will eventually soften and possibly decline under news of shipment offerings. Most of the trading during the past week has been between dealers and jobbers. Some consumers have also covered, and the net result of this business may be to reduce buying later on. Such a condition would affect prices here and in Japan, it was believed. Goods floating to the spot were named at 17½c. per pound.

MONTAN.—Prices here were firm at 6c. to 6½c. per pound. News from Germany was of strong character. Quantities offered for shipment are small, it was said, and there is no disposition to press export business at this time.

SPERMACETI.—Sellers of cakes in the local market asked higher prices, naming 40c. minimum. Blocks were unchanged at 36c. to 37c.

Shellac

Shellac was firm throughout the past week as concerned importers. Almost to a unit they were bulls on the forward market. As far as spot business went, they held stiff price ideas and refused to shade them.

This situation contrasted rather sharply with the operations undertaken by second hands. Prices named by such operators showed considerable split from the levels of importers. This is typical of the shellac market whenever it works into strong position. Second hands have received deliveries of shellac on contracts with importers made when prices were much lower than at present prevailing in Calcutta. This is equally true as to bone dry. These low-cost goods are now coming out at prices much under the schedule named by importers. The fly in the ointment is that, as a rule, only small quantities may be picked up from resellers.

At a late hour in the week importers quoted as follows: T. N., 62c. to 63c.; superfine, 66c. to 67c.; bone dry, 72c. to 73c. per pound. Second-hands reported sales of T. N. at 59c. per pound, transactions in superfine were put through at 62c. per pound, and orders for bone dry were accepted at 70c. per pound. Such is the comparative position of the two opposing forces in the market.

Importers were bullish as to future prices. It was asserted that the Jetawah, Katki and Kusmi crops are likely to be small. They also assert that in fact there is not a great deal of unsold shellac available in this country at present, and there is clear evidence that the larger consumers are not carrying much stock at this writing. Further, Calcutta has shown much strength. The advance has been maintained there despite the contraction in orders that followed the advances of recent date. All in all, importers believe that consumers will not find replacement prices moving in their favor for some time to come.

Calcutta Spot Prices

Late cables from Calcutta reported a firm feeling in the market. Few sellers were noted and there was not much business in the market.

In the following tabulation the price in rupees per pound has been reduced to cents per pound, the result becoming the c.&f. price at New York:

	September 13.		September 6.	
	Rupees.	Cents.	Rupees.	Cents.
September	146	56¾	143	56
October	149	59	145	67⅛

London Spot Prices

London underwent decline earlier in the week, but recovered subsequently. However, a net reduction of 5s was scored as compared with prices a week ago. In the following presentation the shillings per hundredweight have been reduced to cents per pound, the result being the price of T. N. in London, not landed at New York:

	September 13.		September 6.	
	Shillings.	Cents.	Shillings.	Cents.
October	280	56⅞	285	57½
December	275	56	280	56⅝

Shellac Shipments

Shellac shipments from Calcutta to the world for the week ended September 7 showed a gain of 1,072 packages as compared with the previous week. The export to the United States gained

(*Continued on Page* 61)

Evans Lead Oxides

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Industrial and Oil Securities

Public Lacks Confidence in the Market and That Hurts Securities—Many Good Issues Show Decided Weakness

There was not a good undertone to the market last week. At times prices held firmly for a time, only to give way suddenly without any particular reason. Those who try to fit every fluctuation to some happening outside of the market were kept busy trying to invent reasons and excuses, although there was no great mystery about the market unless one was searching for one. The market was simply so narrow and so lacking in heart, because of the absence of public interest, that it took very little pressure to cause even the best issues to react. The public is not trading. That is what is the matter. This is not so much because of the fact that the public has lost faith in the value of securities as it is that it has lost faith for the time being in the market as a market. The value of stocks is affected today because of the great number of Wall Street failures in the last year and the vast amount of money lost by these failures. The fact that few of the firms have been Stock Exchange houses does not impress the public in the least. Until Wall Street finds a way to re-establish public confidence in itself, securities will suffer.

There were declines shown during the period in some very strong issues. It was not the oils that were to blame for the poor undertone, for they held better than some other classes of securities which have not been under as much pressure recently as have the oils. It was not foreign news that caused the fluctuations, and there was little that was bearish in the domestic news. In point of fact, the market was but little inclined to watch the news ticker, being content to keep its attention centered on the stock ticker.

Some industrial issues showed a net advance for the period, but they were few and far between, and were stocks that for some special reason were receiving active inside support.

Continental Can held firmly and closed Friday ¼ point higher than it had been a week before. Davison Chemical continued to attract attention, and made a net advance of 2⅝ points during the week. Among the issues which declined sharply were such usually strong stocks as American Can, Corn Products, Du Pont, National Lead, Mathieson Alkali and United States Industrial Alcohol. The agricultural chemical issues were very soft. It was a disappointing sort of a market, but many of the issues which eased off during the period would rally very promptly with any sort of support.

Quotations

	1923 High.	1923 Low.	Close Sept. 14.
Air Reduction	72⅝	56	64
Allied Chemical & Dye	89	59½	65
Do., pfd.	112	106⅛	35¼
Am. Agricultural Chem.	36⅞	10⅛	13⅝
Do., pfd.	68¾	28	35¼
American Can	106	73½	92¾
American Chicle	13	5½	10¼
American Cyanamid	..	..	*61½
Do., pfd.	..	..	*73
American Cotton Oil	20¾	3⅜	6
Do., pfd.	38⅜	14	*18
American Druggists' Syn.	7⅞	4½	4½
American Linseed Oil	28	17	19
Do., pfd.	58	34	*37
American Metal	55⅞	40½	*43½
Am. Smelting & Refining	68⅜	53	57⅛
Am. Zinc, Lead & Smelt.	19¼	8	8⅛
Armour, pfd.	..	..	80
Callahan Zinc & Lead	12⅜	5	5⅛
Casein Co. of America	..	..	60
Certain-Teed Products	45	32	32
Coca-Cola	81	72	74⅝
Commercial Solvents A	45¾	24	*31
Do., B	30	16	*21
Continental Can	50¼	42⅞	51⅞
Corn Products	139¼	114⅜	123½
Do., pfd.	121½	116¼	*117
Davison Chemical	72	27⅞	50⅝
Dow Chemical	..	..	*44
Du Pont de Nemours	146	106¼	123½
Do., pfd.	89¼	83⅜	86¼
Eastman Kodak	114	89¾	*103¼
Federal Chemical	..	..	*90
Glidden	12⅜	6½	*7
Grasselli	..	..	*120
Do., pfd.	..	..	*95
Heyden Chemical	2½	1⅝	1⅝
Household Products	39¾	28⅝	30
Hercules Powder	..	..	*104
Do., pfd.	..	..	*102
International Agri. Chem.	10½	1	1⅜
Do., pfd.	39⅞	7	8⅛
Mathieson Alkali	64½	36	39
Merrimac	..	..	*93
Merck & Co.	..	..	*73
Do., pfd.	..	..	*74
Mulford Co.	..	..	*29
New Jersey Zinc	179	148	150½
National Lead	136¾	108	118
Do., pfd.	114½	108	*109
Owen Bottle	51¾	36⅝	43¼
Parke, Davis & Co.	..	..	79½
Sherwin-Williams	..	..	29
St. Joseph Lead	23¾	17	19
Sterling Products	67⅝	51	54½
Swift	..	..	106¾
Technical Products	9¼	5¾	5¾
Tennessee Copper & Chem.	12⅝	8	9¼
Texas Gulf Sulphur	65	53¼	55⅞
Union Carbide	..	..	53⅝
United Drug	85¾	74¼	*76⅝
Do., pfd.	48	46½	*47¼
U. S. Food Products	6½	2⅛	4⅛
U. S. Industrial Alcohol	73¼	40	50½
Va.-Car. Chemical	27	6¼	9½
Do., pfd.	69	20¼	20⅛
Vivaudou	23	15¼	18½

* Bid.

Oil Securities

Everything considered, the oils held very well last week. Many of them showed net declines and a few made new lows for the year; but, on the other hand, some of them recorded net advances for the period, and as a whole they did fully as well during the period as any other class of securities. There was little bullish news from the petroleum market, but the Street is beginning to realize that the real loss to the oil companies comes on the decrease in the book value of the stocks of crude and refined oils on hand, and that when this has been digested there will be money to be made out of low-priced oil just as well as out of high-priced crude.

Some of the Standard issues showed slight advances, and some of them eased off further, but, on the whole, they held rather well. Maryland Oil made a new low for the year, and so did Producers' and Refiners', but some of the independent companies' stocks worked higher. Cosden closed on Friday ½ a point higher than it had closed a week before; Cities' Service advanced ⅛ point; Royal Dutch was up ¾ point, and Mountain Producers gained ¼ point.

Among the issues which recorded net declines for the period were:—Associated Oil, 3 points; General Asphalt, 4⅜ points; Pacific Oil, ¾ point; Pan-American Petroleum, ⅞ point; Standard Oil of New Jersey, 1⅛ points; Standard Oil of New York, 1⅞ points, and Tide Water Oil, 2¼ points. Some day the decline in oils will have run its course, but it is not to be expected that any real reaction can take place until there is some definite improvement in the tone of the general market. Some people wise in Wall Street wisdom predict that when the public does get ready to come back into the market the first thing that it will begin to buy will be the oils.

Quotations

	1923 High.	1923 Low.	Close Sept. 14.
Anglo-American Oil Co	19¾	14½	*14
Atlantic Lobos	7¾	2½	3
Atlantic Refining	160	101	102
Do., pfd.	120½	115	*115
Associated Oil	134	103	102
Atlantic, Gulf & W. I.	32⅞	9¾	14¾
Barnsdall, Class A	35	10	*11
Do., Class B	22	8½	*6
Borne-Scrymser	153	110	*140
Buckeye Pipeline	94	82½	*82
Caddo Central	9	1¾	2⅜
California Petroleum	29⅜	18	18⅝
Carib. Syndicate	7⅝	3½	3⅝
Chesebrough Mfg.	238	205	*220
Do., pfd.	118	118	*112
Cities Service	195	131	132
Continental Oil	50	34	*35
Cosden Co.	62½	29½	30⅝
Crescent Pipeline	25	17	*17
Cumberland Pipeline	116	80	*107
Eureka Pipeline	117½	96	*104
Freeport, Texas	22	9½	13
Galena Signal Oil	75	57	63
Do., pfd., new	110	104	103
Do., pfd., old	114	108	*110
General Asphalt	54	23	29⅝
Houston Oil	78	40¾	48¼
Humble Oil & Refining	41	29⅞	28⅝
Illinois Pipeline	171	156	156
Imperial Oil Co., Ltd	123	93	96⅝
Indiahoma	8½	3	3⅛
Indiana Pipeline	103	93	*92
Invincible Oil	19¼	8¼	9⅜
Marland Oil	58¼	22	22½
Mexican Seaboard	19	7	8½
Middle States Oil	12¼	5½	5¼
Mountain Producers	20¼	13	14
Mutual Oil	15¾	8½	9½
National Transit	29	22	*24
New York Transit	138	95	*98
Northern Pipeline	111	96	*102
Ohio Oil	85¾	50	*54
Pacific Oil	48⅞	32⅝	33⅝
Pan-American Pete	98½	54⅞	57⅜
Do., pfd., Class B	86	51	56½
Penn-Mex Fuel Co.	24	13	*12
Phillips Petroleum	68⅞	20½	22⅝
Pierce Oil	6	1½	2¼
Prairie Oil & Gas	273	174	165
Prairie Pipeline	117	95	98
Producers & Refiners	58⅛	22⅝	22⅞
Pure Oil Co.	32	16⅝	17⅝
Royal Dutch	55⅛	32⅛	45
Salt Creek Producers	25½	15½	17
Sapulpa Refinery	4⅞	2	1⅞
Shell Union Oil	18⅞	12⅜	15⅝
Simms Petroleum	16	6½	*7¼
Sinclair Con.	20⅜	19¾	20
Skelly Oil	35	12⅜	14⅛
Solar Refinery	212	170	*175
Southern Pipeline	116	82	95
Southern States	24⅞	12	16⅝
South Penn Oil	196	125	*116
Standard Oil of California	64½	47¼	50
Standard Oil of Indiana	68⅝	50¼	51¼
Standard Oil of Kansas	56½	38	38
Standard Oil of Kentucky	110	76	88⅝
Standard Oil of Nebraska	280	186	*215
Standard Oil of N. J.	44¼	30⅞	31⅝
Do., pfd.	118	114¾	116
Standard Oil of N. Y., new	49¾	36⅝	36⅞
Standard Oil of Ohio, new	317	272	279
Do., pfd.	119	116½	*116
Superior Oil	66⅝	2⅜	2½
Swan & Finch	38	21½	*32
Texas Co.	52⅞	39¾	40⅝
T. & P. C. & O.	24½	7½	7¾
Tide Water	145	95	98½
Transcontinental Oil	14½	3¾	3¾
Union Tank Car	95	81	*85
Vacuum Oil	55¼	41¾	44
Washington Oil	27	23	*25
White Eagle Oil	30⅜	21½	21¼
White Oil	5⅞	1⅛	1¼

* Bid.

Financial Notes

PITTSBURGH PLATE GLASS CO. has declared the regular quarterly dividend of 2 per cent., payable October 1 to stock of record September 15.

MAGNOLIA PETROLEUM CO. has declared a quarterly dividend of $1 a share, payable October 5. In the last two quarters the payment was $1.25.

HOUSEHOLD PRODUCTS, INC., reports earnings of $1,160,000 for the first half of the year, after taxes and depreciation.

MIDDLE STATES OIL CO. directors voted to pass the dividend and made public a statement saying that it is carrying a large amount of crude oil in storage and that it is not deemed advisable to weaken the position of the company until the oil market has become more stable.

GULF OIL CO. has declared the regular quarterly dividend of 27½ per cent., payable October 1 to stock of record September 20.

STANDARD OIL COMPANIES which had dividends payable last Saturday included the following:—Atlantic Refining, Buckeye Pipe Line, Continental Oil, Cressent Pipe Line, Mutual Oil, National Transit, Standard Oil of California, Standard of Indiana, Standard of Kansas, Standard of New Jersey and Standard of New York.

MERRIMAC CHEMICAL CO. has declared the regular quarterly dividend of $1.25, payable September 29 to stock of record September 15.

PANHANDLE PRODUCING & REFINING CO. directors last week decided to pass the regular quarterly dividend of $2 on the preferred stock due at this time.

NATIONAL LICORICE CO. has declared the regular quarterly dividend of 1½ per cent. on the preferred, payable September 29 to stock of record September 21.

SALT CREEK CONSOLIDATED OIL CO. has declared the regular quarterly dividend of 20 cents, payable October 1 to stock of record September 20.

AIR REDUCTION CO. has declared the regular quarterly dividend of $1 on the common stock, payable October 15 to stock of record September 29.

MOUNTAIN PRODUCERS' CORPN. has declared an extra dividend of 10 cents and the regular quarterly dividend of 20 cents, both payable October 1 to holders of record September 15. An extra dividend of the same amount was declared three months ago.

HUMBLE OIL & REFINING CO. has declared a quarterly dividend of 30 cents, payable October 1 to stock of record September 15. This is the same amount as declared three months ago.

TURMAN OIL CO. has declared the regular quarterly dividend of 3 per cent., payable October 20 to stock of record September 29.

LONE STAR GAS CO. has declared the regular quarterly dividend of 1½ per cent. and an extra of ½ per cent., payable September 29 to stock of record September 20. This is the same as declared for the previous quarter.

GULF OIL CO. has completed plans whereby employes can subscribe for shares of the corporation. The plan will go into effect October 1. The amount of stock to be offered will be governed by employes subscriptions. The offering price will be quoted by the price of shares in the open market. No new stock issue is contemplated.

MERCK & CO. has declared the regular quarterly dividend of $2 on the preferred, payable October 1 to stock of record September 17.

STANDARD OIL OF NEW YORK stockholders last week voted their approval of the plan to increase the capital stock by $10,000,000, making the authorized capital stock $235,000,000. This increase is primarily to provide stock for subscription by employes of the company. It is provided in the stock purchase plan that each employe of Standard Oil of New York will have the right to subscribe for stock to the extent of 20 per cent. of his annual salary. Whatever amount is subscribed by an employe will be added to by the company to the extent of 50 per cent. of the total, which means that the company will pay one-third of the total price of the stock to the employe. This will continue operative for a period of five years unless terminated by action of the board. The price at which an employe may subscribe to stock will be fixed quarterly. The board also voted to increase the number of directors from nine to eleven and passed a resolution enlarging corporate powers. The time of existence of the corporation originally fixed at fifty years, was made perpetual.

SINCLAIR CONSOLIDATED OIL CO. reports that August 31 it had 34,426 holders of common stock, against 30,827 on the same date in 1922. Preferred stockholders increased from 536 to 6,123.

INTERNATIONAL AGRICULTURAL CORPN. stockholders have been notified that a special meeting will be held October 3 to ratify a proposition to authorize $10,000,000 par value of prior preferred stock to consist of 100,000 shares of $100 par to be created by a reclassification of $8,000,000 par value of common stock and $2,000,000 par value of preferred stock, now authorized but not issued. The prior preferred stock will be entitled to a dividend of 7 per cent. cumulative from date of issue before any dividends shall be paid or declared upon any other class of stock.

MARLAND OIL CO. directors last week voted to pass the regular quarterly dividend of $1 due at this time and issued a statement which said:—"Notwithstanding the strong financial position of company and its excellent earnings statement. This action was a precautionary measure taken because of the present demoralized state of the industry." A financial report as of July 31, 1923, was presented at the meeting showing current assets of $19,200,000, against current liabilities of $9,300,000, a ratio of slightly over two to one. Earnings of company for first seven months of current year were recorded at $7,104,000 after all interest charges, but before reserves.

EAGLE-PICHER LEAD CO. directors will hold a meeting at Cincinnati, September 18. All the directors are expected to be present except Frank L. Perin, who is in Europe.

BRITISH AMERICAN OIL, LTD., has declared the regular quarterly dividend of 50c., payable October 1 to holders of record September 22.

PAN-AMERICAN PETROLEUM CO. has declared the regular quarterly dividends of $2 on A and B common shares, both payable October 20 to stock of record September 29.

MEXICAN PETROLEUM CO. has declared the regular quarterly dividend of 4 per cent. on the common and 2 per cent. on the preferred, both payable October 20 to stock of record September 29.

ATLANTIC REFINING CO. reports gross income for the first half of the year of $58,292,114. After allowing for the regular dividends on the preferred stock, there remained a balance equal to $2.20 a share earned on the $50,000,000 capital common stock of $100 a share par value outstanding. Dividends paid during the first half of the current year aggregated $1,700,000, of which $700,000 was the regular semi-annual requirement on the $20,000,000 7 per cent. preferred stock outstanding, while $1,000,000 represented the two quarterly payments of $1 each on the $50,000,000 common stock outstanding.

CHEMICAL PRODUCTS, LTD., reports for the year ended June 30 total receipts from sales amounted to $187,609, as compared with $36,023 in the previous year. Cost of sales amounted to $169,549, as against $34,212. Gross profit was $18,060, as against $1,810 a year ago. Commercial expenses totaled $43,362, which left a net trading loss of $25,302. The impairment account at June 30, 1923, stood at $254,817. Assets are given at $3,506,966. Current liabilities total $75,563, while the funded liability is $242,241. The reserve for depreciation of plant is $604,838.

PRAIRIE OIL & GAS CO. has declared a dividend of $2 a share, payable October 31 to stock of record September 29.

AMERCAN AGRICULTURAL CHEMICAL CO. has reduced the number of its directors from sixteen to twelve. G. C. Bingham, T. D. Harlington, M. E. Wheeler and E. F. Daniels, Jr., retire.

Gums and Waxes

(Continued from Page 60)

1,422 packages; to the United Kingdom, 826 packages. The movement to the Continent was 70 packages less, and to all other ports 10 packages less. The official figures are as follows:

	1923. Sept. 1-7.	1922. Sept. 2-8.	1923. Aug. 25-Sept. 1.	1923. Total to date.	1922. Total to date.
U. S.	4,835	770	3,413	4,835	147,869	100,636
U. K.	949	444	123	949	49,045	47,902
Cont.	180	480	250	180	24,334	15,328
O. P.	72	382	178	72	9,490	8,667
Totals	6,036	1,926	4,964	6,036	230,738	172,533

Arrivals of shellac at Calcutta for the week ended September 10 totaled this year 270 tons; previous week, this year, 355 tons; last month, 289 tons; last year, equivalent date, 124 tons.

Total arrivals at Calcutta since January 1 this year are 14,615 tons; to equivalent date last year, 10,485 tons.

Flavor Makers' Committee Discusses Proposed Laws

The Executive Committee of the Flavoring Extract Association met at the Hotel Astor, this city, last Friday, and pending legislation in different States, together with legislative proposals to be offered in others and such additional problems as are of special interest to the flavoring extract men were discussed at considerable length.

Because of the importance of the session, there was a full attendance and the closest interest was manifested in the proceedings. Bills offered in the legislatures of Georgia and Alabama affecting the flavoring extract trade and proposed legislation to come up in Arkansas at the special session called by the Governor September 24 received attention. The proposed revision of regulation No. 60 of the Treasury Department, having to do with alcohol, was among the matters on which action was taken. Richard H. Bond, McCormick & Co., Baltimore, secretary of the committee, made a lengthy report.

Wood Products Output in July Was Lowest of Year

WASHINGTON, Sept. 12, 1923.

Production of methanol in July totaled 645,673 gallons and acetate of lime 12,873,572 pounds, according to figures of the Department of Commerce. Both figures are the lowest so far this year. Wood consumption was 76,774 cords and wood on hand August 1 totaled 794,416 cords.

Proprietary Association Moves

The offices of the Proprietary Association will be moved September 20 from Chicago to 423 Star Building, Washington, D. C., according to an announcement sent to the trade by E. F. Kemp, general representative.

The Crossley Chemical Co., Searruca, Pa., which established the first wood alcohol plant in eastern Pennsylvania, has been purchased by the Metropolitan Charcoal Co., White Haven, Pa.

TRADE MARK
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Hyposulphite of Soda
Sodium Sulphide
Epsom Salts
Sodium Peroxide
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Copper Cyanide
Zinc Sulphate
Zinc Cyanide

Importers

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White Arsenic 98%, Viking Brand
Gray Arsenic 95%

Representing Societe d'Electro-Chimie & d'Electro-Metallurgie, Paris

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Industrial Chemicals

Arsenic Continues to Advance—Sal Ammoniac Higher on Scarcity—Caustic Potash Firm—Barium Strong

The market for industrial chemicals was hardly so active last week as during the previous one. Trading was confined to a few items and was not at all general. There did not seem to be evidence pointing toward an early development of a general demand. Manufacturers have been more active than dealers, contract withdrawals proceeding at a satisfactory rate. Some accumulation of stocks in first hands has occurred during the past two months, but it is not sufficient to have a depressing effect on the tone. Manufacturing costs are high and it is not believed that prices for next year's contracts will be any lower than those in force at the moment. The odds are all on the other side.

White arsenic was in excellent demand and one of the bright spots in the local market. Several car lots were sold, with higher prices established on these transactions than have been seen for some months. The demand has been largely of foreign origin, and the foreigners have not hesitated to pay high prices to secure goods. Spot stocks were much depleted. Domestic producers have offered contracts for delivery over the latter part of the year and the beginning of 1924, but have actually taken on only a few. There was a manifest disinclination to assume obligations, although consumers were anxious to get fixed. Just what will be done on Japanese shipments remains to be seen; as it is, shipment prices are several cents above present spot prices, and out of the question when it comes to the making of calcium arsenate. Arsenate has to be made to sell at certain prices within the means of farmers, and high-priced arsenic renders that impossible.

Caustic potash was on the firm side, and imported material was expected to advance in the near future. Shipments were fractionally higher and only limited quantities can be had from Germany. The spot market appeared lightly stocked and in a most sensitive position. It was felt that any sustained demand would see an immediate advance. Carbonates were plentiful and with all the dealers trying to get rid of goods, prices were weak. Bichromates have succumbed to the competition between makers and were lower. It was freely admitted that quoted levels were higher than actual selling prices. Sal ammoniac advanced sharply. Low priced white was cleaned out and stocks were less than expected. Demand was good all through the week, and dealers were all quoting higher on Friday.

Advanced

Ammoniac, sal, white, ½c.
Antimony, metal, ½c.
Arsenic, white, ½c.
Barium carbonate, $2.

Declined

Argols, crude, ½c.
Citric acid, imp., ½c.
Potash, bichromate, ¼c.
meta-bisulphite, 1c.
Soda, bichromate, ¼c.
prussiate, yellow, 2c.
Tartaric acid, imp., ½c.
Urea, 2c.

Index Number—25 Chemicals

The following index numbers were compiled from twenty-five representative chemicals, and give an idea of the present market situation. The normal is predicated on prices as of August 1, 1914:—

Normal—326.6

Last week.	Prev. week.	Last month.	Last year.
414.3	412.6	412.1	425.7

ALUM.—Nothing has occurred in either the potash or ammonia grades. Prices have not changed since the last report, and there has been no improvement in trading. Stocks of both were in some volume, but imported potash was not being pressured so much. The ammonia lump was quoted at $3.50 to $3.60 per 100 pounds, with other grades in proportion. Potash lump was 3c. to 4c. per pound. Chrome grades were 6c. to 7c., and soda 3½c. to 4c.

AMMONIAC, SAL.—The spot market for imported white granular suddenly looked up, and the price advanced rapidly under a good demand. The best quotation at the end of the week was 6½c. per pound for spot goods, with shipments at 6¼c. It was doubtful if less than 6½c. could have been done on spot, as supplies were narrowly distributed and were tightly held. Domestic was 7½c. to 8c. per pound at works. Imported gray was not active, and was around 9c., although that price was susceptible to shading. The lump was 15c.

ANTIMONY PRODUCTS.—The market was quiet, but prices were maintained at former levels. Needle powdered was from 6½c. to 7c. per pound; and the white oxide was 8c. to 9c. The metal was 7½c. to 8c.

ARGOLS.—Were extremely dull and the price down to 6½c. to 7½c. per pound.

ARSENIC.—White powdered arsenic was in good demand all last week, and the result was a further advance in the price of spot goods. The best that could be done at the end of the week was 11c. per pound, and up to 12c. was asked for small lots. Two carloads were sold at 11c., and factors stated that two more could have been disposed of if the price had been fractionally less. Spot stocks were much depleted as a result of the heavy buying. Much of the goods sold during the week was moved for export, shipments going to European and Eastern countries. Producers were not in the market, and while the price of contracts over the winter and early part of 1924 was nominally 10½c., actually none were being accepted. Importers did not know where they stood, and Japanese was higher than that on shipments, and hardly any offered. The red was from 15c. to 15½c. on spot, and scarce.

BARIUM PRODUCTS.—On the chloride higher prices have been quoted, and the best range last week was $85 to $95 per ton. Carbonate was from $70 to $77 per ton. Foreign was scarce.

BLEACHING POWDER.—The market was weak at $1.50 to $1.75 per 100 pounds. Leading makers admitted that less than $1.50 has been accepted on business lately. Stocks were still ample, and the market has not recovered from the liquidation of these.

BLUE VITRIOL.—Domestic was somewhat firmer in tone, and the price was $5 to $5.10 per 100 pounds for large crystals. There has been a fair demand, but trading was not as good as at this time last year. Stocks were ample. Imported material was neglected and the price was from $4.75 to $5 per 100 pounds.

CALCIUM ARSENATE.—The market was flat. Dealers were trying to get rid of what they had at any price obtainable. The market was nominally 12c. to 14c. per pound, but down to 11c. was considered in line.

CELLULOSE ACETATE.—Was unchanged at $2 per pound, with some available at $1.60, which was suitable for aeroplane dope.

CHLORINE.—Liquid chlorine was weak, and makers were finding it difficult to secure an outlet for their production. Contracts have been made at 4½c. per pound, while the open quotations were from 5c. to 6c. per pound.

COPPER, CYANIDE.—A quiet demand was noted for this chemical, and the price was steady at 46c. to 47c. per pound. Leading makers had only small quantities on hand, but these were deemed sufficient to meet consumptive requirements of the present.

FLUORSPAR.—The price of gravel at the mines was recently advanced. The price was now $22.50 per ton. Some washed gravel has been offered on spot at $51 per ton in bags.

GLAUBER'S SALT.—Domestic was in good demand and stocks were small. Production during the summer months was small, as makers cannot get successful crystalization in hot weather. Consumers have shown a decided preference for domestic, despite the lower prices at which the foreign has been available. Quotations on prime salts from makers were $1.35 to $1.45 per 100 pounds in barrels. Imported was quoted at 75c. to 85c. per 100 pounds in bags.

LEAD, ACETATE.—Trading was along quiet lines. The market was generously stocked, and prices were hardly firm. Some of the makers have been shading prices lately, probably discounting the lower cost of raw materials. So far there has been no official change in the schedule. The range per pound:—Brown, broken, 13c. to

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 6; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

Ask An Advertiser—OPR—Be An Advertiser

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Solvay 76% Caustic Soda
Solid—Flake—Ground
Solvay Super Alkali {15% / 36%—45%
Solvay Snow Flake Crystals
Solvay Laundry Soda
Solvay Cleansing Soda
Solvay Tanners Alkali
Solvay Tanners Soda
Solvay Liquid Caustic Soda

The Solvay Process Company

Detroit, Mich. Syracuse, N. Y. Hutchinson, Kans.

Sales Agent - Wing & Evans, Inc. - *40 Rector St., New York*

Boston Cincinnati Chicago Cleveland Syracuse Detroit Indianapolis Pittsburgh

13½c.; white, crystals, 14c. to 14½c.; and granular, 13¾c. to 14¼c.

LIME, ACETATE.—An improvement in domestic demand was noted, and sales were on a broader basis than formerly. Stocks were plentiful, and the price was steady at $4 per 100 pounds. The export demand has been poor and few shipments have gone forward.

MAGNESITE.—Calcined was quoted at $55 per ton, but in some cases that could be modified. Demand has not been at all active and the market was featureless. Supplies were only moderate. The crude magnesite was anywhere from $18 to $20 per ton, and moving irregularly. Demand has not been pronounced, but there has been some small lot buying.

NICKEL SALTS.—Irregular buying of small lots was noted. Demand was not large on the whole, but indicated a better feeling on the part of the consumers, who formerly were taking practically nothing. Prices were unchanged at 10½c. to 11½c. per pound. Imported was not in evidence.

PHOSPHORUS.—There was no improvement in supplies last week, and it was as hard to get the red and sesquisulphide as formerly. Only small quantities of red have been offered in the market and the price was from 70c. to 75c. per pound. The sesquisulphide could not be had at all. Some demand for white was reported and sales were noted at 35c. to 40c. per pound.

POTASH, BICHROMATE. — The market was extremely quiet and prices were easier. Toward the end of the week makers quoted lower prices at 9¾c. to 10c. per pound, and it was intimated that even those might be shaded.

POTASH, CAUSTIC.—The spot market for imported was extremely firm in tone and the price of the 88 to 92 per cent. was maintained at 7¼c. to 7½c. per pound. The best that could be done on shipments was 7c. c.i.f., but that was doubtful, and was feasible only on an exceptional quantity. On ordinary business, the best shipment price was 7⅛c. to 7¼c. c.i.f. Not much interest was shown in shipments, but there was quite a good spot demand, and stocks were much reduced. The firmness locally derived from the good demand, the shrinkage in spot stocks, and the uncertainty and high prices of shipments. Industrial conditions in Germany were not such as to induce belief that there would be any large quantities available for export this fall, and local dealers have been emphasizing this fact. Spot stocks were not large, although it was intimated by one or two that a real buying movement would see more goods come to light than was generally thought likely. However, the beginnings of such a movement were certainly indicated during last week and the preceding one. Instead of any increase in spot offerings, there was a sudden firming of the tone and a fractional advance, as recorded in the previous issue of the Reporter. In the light of such developments it did not seem reasonable to believe that there were any larger stocks on hand than importers claimed. Domestic producers have done moderately well and contract withdrawals were in some volume. The works price was 9c. to 10c. per pound, depending on quantity and applied to prompt as well as forward shipments.

POTASH, CARBONATE. — There was plenty of imported carbonate around, but there was mighty little demand, and the combination was not the best for a continuation of a steady tone. Dealers were largely stocked with the carbonates, there having been considerable accumulation of stocks over the past two or three months. Demand was all for the caustic, and dealers have been forced to lower prices of the carbonates. The previous week saw a decided break in selling levels locally, but little modification in replacement costs. Spot stocks were in excess of current requirements, and the fact that some of the sellers had been carrying these goods since last spring made them much more anxious to sell than might otherwise have been the case. Thus, consumers who were out to get any large lots might have secured some bargains. As a matter of fact, no one seemed to be looking for any at all, even a small lot, for the spot market during the week hardly stirred. Spot selling prices were 6¾c. to 7c. per pound for 96 to 98 per cent. calcined; 6¼c. to 6½c. for 80 to 85 per cent. calcined; and 6¾c. to 7c. for the hydrated. The latter was comparatively scarce, but that did not prevent the tone from being easy and prices susceptibel to shading. Down to 6½c. was hinted as possible on a firm bid.

POTASH, CHLORATE. — Imported chlorate was rather strong on spot. There has been little imported in the past three months and not much was offered abroad. The spot market has been fairly active and there has been constant absorbtion of supplies. Some of the prominent importers were out of the market for the time being, having sold all their holdings and with nothing in sight for the time being. The price of good chlorate was from 7½c. to 8c. per pound, with a few asking 7¾c. inside. This was prime goods. Some off grade has sold at less, but was unsuitable to many purposes and not at all popular. Domestic makers held at 8½c. to 9c. at works for prompt and forward shipments. There has been a fair movement on contract. Stocks in first hands were ample to take care of the current demands.

POTASH, CYANIDE.—Quiet trading conditions featured this section. The price was unchanged at 47c. to 50c. per pound, and stocks were not large. The market was holding steady at the above levels despite the slow demand.

POTASH, META-BISULPHITE. — The market was irregular and prices were weak. It was possible to buy at 14c. to 16c. per pound. Spot stocks were in good volume, there having been more importations within the past two weeks.

POTASH, PERMANGANATE.—Domestic was available from the makers at 17c. per pound at works. Demand has not been unusual, but stocks were ample to take care of whatever consumptive interest might develop. Imported material was held fairly steady at 17½c. to 18c. per pound on spot, and was moving in a small way. There has been less available since the recent buying movement, which cleaned out a good deal of the surplus spot holdings. Importations have been smaller of late, and the high replacement costs have discouraged dealers. It was impossible to secure goods in the German market at less than 16½c. c.i.f. in bond, equivalent to 20½c. duty paid.

POTASH, TITANIUM OXALATE.—Demand was along quiet lines and the market was rather easy. Stocks have accumulated in first hands and were quoted at 27c. per pound.

SALT CAKE.—The inactive demand of recent weeks has allowed of some accumulation of supplies, but there has been no yielding of the price. Demand has again shown signs of picking up, and while stocks were somewhat freer, no disposition to lower levels was noted. The present manufacturing costs prevented any material changes. Some of the big makers were still sold up for the rest of the year, and there has been some interest in next year's contracts also Quotations were from $25 to $27 per ton for bulk cake. Barrels were $2 per ton higher.

SALTPETER. — Demand continued along steady routine lines. None of the refiners have made any changes in quotations in recent months, and conditions surrounding production were of an essentially steady character. The range per pound follows:—Crystals, according to size, 7½c. to 9c.; granulated, 6½c. to 6¾c., and powdered, 7½c. to 7¾c.

SODA, ACETATE.—The market was extremely slow. There was practically no buying in any direction and the tone was very weak. The makers were trying to get from 5¼c. to 5½c. per pound at works, but admitted that nothing was possible at those levels, and it was hinted that 5c. was more like the market. The spot market was quoted from 5c. to 5½c. for the most part, there being some holders anxious to get rid of stocks.

SODA ASH.—There were no changes in the quotations of the leading makers. Demand, if anything, was better than before, and contract withdrawals were in greater volume. At the same time there was plenty of ash on hand, and there is no likelihood of any difficulty in consumers getting all they want for their fall operations. The volume of deliveries on contracts continued heavy and a good demand over the balance of the year is expected. Makers are not particularly anxious to take on much business very far in the future at the present contract prices, owing to the increased costs of production. Contracts in light ash, on the basis of 58 per cent., were quoted by makers at $1.38 per 100 pounds in car lots at works in bulk; at $1.45 to $1.50 in bags, and at $1.69 in barrels. Dense ash, on the same basis, was $1.42 in bulk, $1.51 in bags and $1.75 in barrels. Spot and prompt orders were 5c. per 100 pounds higher. Spot trading was quiet, owing to the fact that nearly all the small consumers are under contract and are getting shipments direct from works, and dealers have not found it expedient to carry much on hand.

SODA, BICARBONATE. — Demand was maintained and the price was steady at $2 per 100 pounds in barrels at works, with kegs 25c. per 100 pounds higher. Stocks were not large, as there has been a pretty good movement during the summer, and with production somewhat slacker, a surplus was avoided. Spot goods commanded a premium of 25c. per 100 pounds.

SODA, BICHROMATE. — The dull week was destructive of the tone, and prices were cut fractionally by first hands at the end of the period. Quotations were from 7¾c. to 8c. per pound, but fully ½c. less has been accepted on some recent business.

SODA, BISULPHITE.—Stocks were good and demand was slow, and the tone was distinctly easy. None of the big sellers have made any changes in quotations, however, and the powdered was still offered at $4.25 to $4.75 per 100 pounds. The liquid was from $1.50 to $1.60, depending on percentage.

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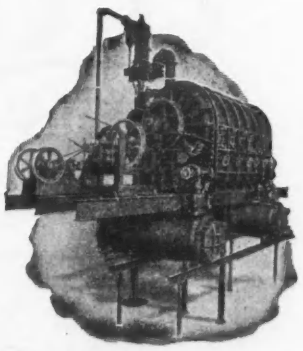

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little done on spot last week, and this phase of trading has been pretty much neglected lately. The reason for the decrease in spot trading in caustic was due to the fact that practically all the consumers, big or little, were under contract with makers, and were receiving shipment sdirect from the works. Spot stocks of caustic were small at best. Makers were quoting contracts at the former level of $3.16½ per 100 pounds basis 76 per cent. in car lots at works. Spot and prompt orders were 10c. per 100 pounds higher. Makers were kept busy and plants were running full in order to keep up with the requirements of consumers. There was a manifest disposition on the part of makers to hold back on contracts, and not much business has been accepted for delivery far in the future, as the increasing cost of manufacturing was something to be reckoned with. The export situation was hardly as favorable as formerly, but still some business was being done. Prices on export business were $3.25 to $3.30 f.a.s. Ground and flake for domestic consumption were $3.60 to $3.80 per 100 pounds flat at works.

SODA, CHLORATE.—Imported was in irregular demand, and the price was kept at 6½c. to 6¾c. per pound. Some sellers were inside—as far as quotations went—at 6¾c. Domestic has been in good demand from consumers, and factors have done well on contracts. The movement has been excellent, and the price was firm at 6½c. to 7c. per pound at works, depending on the quantity. The elimination of foreign from the local market to a great extent, and the high replacement prices which made further importation uncertain has caused consumers to take domestic in ever increasing volume. The quality of domestic too, had much in its favor.

SODA, CYANIDE.—Imported was anywhere from 19½c. to 21c. per pound. There were some new importations during the week. Demand has not been heavy, and the tone was lacking in firmness. Stocks, however, were not excessive and were carried by hands sufficiently strong to maintain current levels. Domestic has been in less demand than makers hoped for, and was quoted at 22½c. to 23c. per pound. Interest in 1924 prices was expressed, but nothing will be available for at least two months of a definite nature.

SODA, FLUORIDE.—Trading was at a standstill. The local market was well stocked with imported, and the price was easy at 8½c. to 9c. per pound. Domestic makers have done little, and were quoting from 10c. to 10½c., after having sold as low as 9½c.

SODA, NITRATE.—Trading conditions were of seasonable character. Demand was along quiet lines, and the market routine for the most part. Quotations were unchanged. The range per pound:—Granulated, 4c. to 4½c.; powdered, 5¼c. to 5½c.; and crystals, 5c. to 5¼c.

SODA, NITRITE.—Importers were quoting at 7½c. to 7&c. per pound. Demand was maintained, and indicated a resumption of consumptive buying. Domestic was available from makers at 7¼c. to 7½c. per pound at works.

SODA ,SAL.—Makers were well sold ahead, and deliveries were proceeding steadily. Stocks were not large, as there was little production during the warm weather. The price was firm at $1.15 to $1.25 per 100 pounds.

SODA, SULPHIDE.—Has been in little demand during the week, and prices were easy. Imported material was around, and the recent break in prices has never been recovered. Quotations for the 60 per cent. fused were from $3 per 100 pounds, depending on quantity and seller. The broken was nominally $3.25, but down to $3 has been done on that variety also. Crystals were $2.25 to $2.50.

SULPHUR PRODUCTS.—Flour was along steady lines. Demand has kept up, and both ordinary and superfine grades were in demand. The price of commercial flour was from $1.35 to $1.70 per 100 pounds, while superfine was $2 to $2.40. Chloride and dioxide were neglected, and prices were hardly more than nominal. The chloride was 4c. to 5c. per pound, and dioxide 8c. to 10c. Some was available on spot at 10c.

TIN PRODUCTS.—Bichloride was 12½c. to 13c. per pound. Tin crystals were 31½c. to 32c. Both were in steady demand. The oxide was 45c. to 47c. per pound.

UREA.—Imported was plentiful, and crystals were quoted as low as 21c. to 23c. per pound. Some lots have been offered as low as 20c. Demand was not very active.

ZINC PRODUCTS.—Carbonate was in scattered demand at 14c. to 16c. per pound. The dust was moving slowly at 10c. to 12c. per pound. Sulphate was 3¼c. to 3⅜c. The chlorides have been moving better of late, with fused 5c. to 6c. per pound, and granular, 6c. to 7c.

ZIRCONIUM OXIDE.—The price was 60c. to 75c. per pound. Demand was along light lines.

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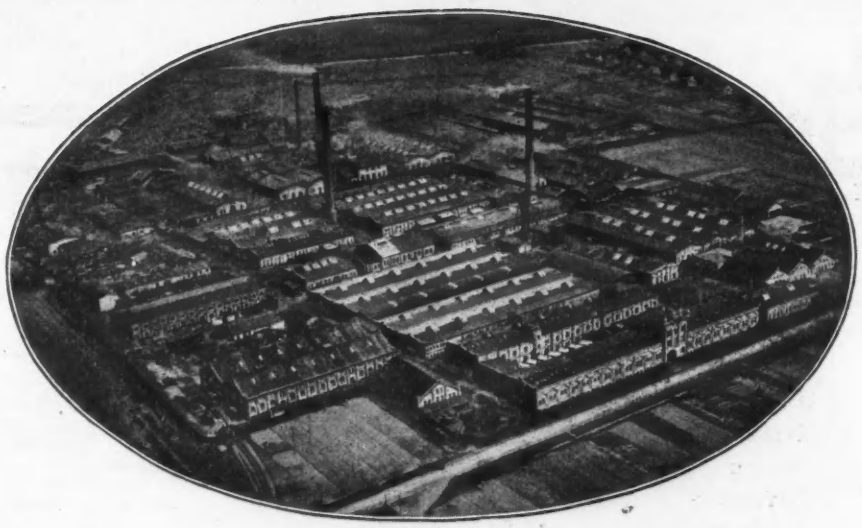

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Acids

With the improvement in industrial conditions throughout the country obviously gaining from day to day, interest in heavy acids has been stimulated. Sulphuric acid particularly has been meeting with a good demand, and contract withdrawals during the past few days have taken a turn for the better There was more inquiry locally for muriatic also, and that acid was also coming in for attention from big consumers who had contracts with makers. There has been a general speeding up in both these materials, and it is expected that this improvement will continue throughout the fall, and that by the end of this month there will be a bigger movement under way than even last year showed. Stocks of both muriatic and sulphuric were generous and makers will be able to handle all the business coming their way without undue difficulty. Just what will be done on next year's contracts remains to be seen. It is not likely that there will be any marked changes in the prices, as the present manufacturing costs offer little leeway, especially towards a reduction.

Citric acid was quite active. Orders were mostly for small quantities but the aggregate made an impressive total when the business of recent weeks was considered. The price was easier as the result of a lower shipment price and the competition between dealers on spot. Tartaric was inactive and the week dragged. An easier feeling was discernible here also and prices yielded fractionally to the extreme dullness.

The rest of the list presented little of novelty. Prices were unchanged for the most part, and while there was an easier feeling in some items, no quotable changes occurred in the prices. Less demand for oxalic has somewhat chilled the dealers' ardour, and these factors were willing to shade the price of foreign somewhat when good business presented. Makers made no changes but were not doing a great deal. Lactic has been quite active, but was steady. Foreign competition has been practically eliminated. Domestic makers took a firm stand and have kept prices down at such attractive levels that importers could not meet them. Consumers have taken full advantage of the situation and demand has been excellent. Competition from importers of formic has interfered with sales of domestic to a great extent. It was stated that the domestic maker was about to abandon production, but so far it has not been definitely concerned. Manufacturing costs in this country were so high as to prevent the marketing of formic as cheaply as it could be imported.

Index Numbers—12 Acids

The following index numbers have been compiled from 12 representative acids and give an indication as compared with normal times. The normal is predicated on prices of August 1, 1914:—

Normal—12.6

Last week.	Prev. week.	Last month.	Last year.
15.8	15.8	16.2	15.8

ACETIC.—With the price of acetate of lime steady, there have been no changes in producers' prices of acid. Demand has been along good lines and while most consumers have not been anxious to take on any large quantities, the aggregate of business was almost impressive, especially in these dull times. The export situation offered little of interest, inasmuch as few inquiries have been received lately and no orders placed. The English were the biggest takers, but advices indicate that stocks there are now in generous volume and little more will be required for some time. The local resale market was not well supplied and dealers could not offer as a general thing. The range per 100 pounds:—28 per cent., $3.38 to $3.63; 30 per cent., $5.48 to $5.73; and glacial, 99 per cent., $12.78 to $13.03. The anhydrides were along routine lines. The price of the 85 per cent. was from 39c. to 41c. per pound, depending on the container and the quantity. The 92 per cent. was 42c. to 45c.

BORIC.—The reduction in price which was announced during the previous week did not have much effect on the trading. The market continued along steady lines and demand was wel up to the average. Stocks were ample and the competition between first hands as keen as ever. Most of the changes in selling prices arise from the fact of this competition, as the conditions surrounding production have undergone such slight changes in recent months as to be almost negligible. The powdered and crystals were quoted as follows per pound, depending on container:—Sacks, 9½c. to 10c.; barrels, 10c. to 10½c.; and kegs, 10½c. to 11c.

CAMPHORIC.—No changes here. The price remained at $5.90 to $5.95 per pound, and leading makers have done some business at those figures. The price of raw material recently declined, but nothing has been done to the acid as yet. Stocks were adequate to meet all requirements of consumers, and factors could have handled a good deal more business than was offered them.

CHROMIC.—There have been no changes in the price of this acid for the past two years and conditions surrounding production were of sufficiently steady character to indicate little possibility of any changes for some time to come. Demand has been good and supplies have moved regularly to consumers. Stocks were in ample volume, but were in control of first hands, and quotations were 39c. per pound for technical and 40c. for 98 per cent in drums.

CITRIC.—Conditions were essentially unchanged from the previous week. Demand for imported citric has been rather better than most of the trade expected, and small lot sales on spot were in good volume. Stocks were still large and the dealers would have had no trouble in taking care of a good many more orders than they received. This last minute spurt was rather a surprise to most of the dealers, who had hardly expected the market to show such signs of life owing to the lateness of the season. The price eased somewhat, and spot foreign was to be had at 49c. to 50c. per pound. This compared with a replacement price of 37c. duty paid, which was now being asked by the Italian makers. Domestic makers have made no changes in their selling prices and were quoting at 49c. to 50c. and taking care of regular customers in satisfactory fashion.

FORMIC.—Imported acid was very plentiful, and it was from stocks of this nature that most of the consumers were getting their goods. Demand has been good for the foreign, and considerable has been sold since the first of the month. Importation has been rather lighter, if anything, but there had previously been some accumulation of stocks. The price of imported was much cheaper than domestic, ranging from 12c. to 14c. per pound, for the most part, depending on the grade. Domestic was to be had from only one maker, who quoted the 85 per cent at 16c. per pound. The cost of production in this country was so great that it was impossible for him to offer a much better price than that.

GALLIC.—No changes occured in the prices quoted by the leading makers. Demand was somewhat better, and the market began to take on a more seasonable aspect. Quotations were 45c. to 50c. per pound for technical, and 55c. to 60c. for the U.S.P. Stocks were ample to meet all requirements, but the tone was steady.

HYDROFLUORIC.—Demand has not shown much improvement and trading dragged during the week. Stocks were in some volume, but were not excessive, as makers have not been producing much during the summer. The price was decidedly steady in tone despite the quiet conditions, as there was an advance in the cost of raw material a little while ago. Factors have made no move toward equalizing costs on account of the quiet conditions and limited nature of production, but it is thought likely some changes may be effected in the future. Prices were per pound:—30 per cent, 6c. to 7c.; 48 per cent, 10c. to 11c.; 52 per cent, 11c. to 12c.; and 60 per cent, 13c. to 14c.

LACTIC.—A big improvement in demand was observable here, and factors have been making large shipments to consuming trades. Demand has been active from the leather trade and considerable quantities were shipped to the tanners. Imported material has not figured in the trading, and as long as domestic makers keep selling prices as low as they have there seems little likelihood of any importations of foreign acid. The present selling schedule of domestic makers was so low that importers could not compete successfully, and have given over trying to market foreign made goods in this market. Stocks of domestic were ample to meet requirements of consuming trades in the country. The range per pound:—22 per cent, dark, 4½c. to 5½c. per pound; 22 per cent, light, 5½c. to 6½c.; 44 per cent, dark, 9½c. to 10½c.; and 44 per cent, light, 11½c. to 12½c. The U.S.P. grades were:—Eighth revision, 55c. to 60c. per pound, and the ninth, 65c. to 70c.

MURIATIC.—Demand was much better. Contract withdrawals increased in volume, and there was more activity on spot. Quotations were rather firm in tone, although supplies were in better volume than for some time. Factors anticipate a very heavy movement by the end of the month. Leading producers quoted per 100 pounds:—18 degrees, 90c. to $1; 20 degrees, $1 to $1.10, and 22 degrees, $1.75 to $2.

NITRIC.—Demand has been rather slow, and the market has been along routine lines for the most part. Stocks were ample, and some of the makers were carrying a little too much for their peace of mind. On this account, there has been some shading on recent business. A few makers stated they would not go under the schedule, but others have not a little off when confronted with firm business, and there was no other way of getting it. Raw material was in an unsettled position, and somewhat cheaper, reflected in the tendency of the acid and the attitude of the makers. The schedule of leading makers, per 100 pounds, in carboys:—36 degrees, $4.50 to $5; 38 degrees,

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$4.75 to $5.25; 40 degrees, $5 to $5.50, and 42 degrees, $5.25 to $5.75.

OXALIC.—Demand was irregular, and the market rather weak in tone. Domestic makers continued to ask 12c. to 12½c. per pound at works, but were not selling a great deal. Imported was plentiful, and dealers were keenly competitive, so that sales as low as 12c. have occurred. The average spot price for foreign was from 12¼c. to 12½c. per pound for the most part, but the right sort of business sometimes secured other prices.

PHOSPHORIC.—Was without much life. The market quieted down, and there was little trading in any variety. The technical was 7½c. to 8c. per pound. The U.S.P. 50 per cent. was 15½c. to 17c. in a large way; while the 85 and 88 per cent. was 18c. to 20c. Small lots were 26c. to 28c. per pound respectively.

SULPHURIC.—The tone was steady and demand better. Stocks were somewhat large, but contract withdrawals have improved, and factors expect there will be no trouble in moving them all satisfactorily. The 66 degree was quoted at $15 to $16 per ton, and the 60 degree at $11 to $12. Contracts over the balance of the year were already held by makers, but there has been interest in next year business as well. It is thought that prices will be well maintained, however, on this forward business.

TARTARIC.—An easier feeling developed in important material, the result of the cheaper shipment price, and the absence of demand on spot. There was hardly any buying at all last week, and for the most part the market stood still. Stocks were good, but were not excessive. The competition between the dealers was keen, and prices were forced down to 32½c. to 33c. per pound, but some indication that fractionally less might be accomplished on real business. The shipment price was now 26c. c.i.f. in bond, equivalent to 32c. laid down here. Domestic makers quoted unchanged at 36c. per pound for both powdered and crystals. There was a report around that some importer had offered at 31½c. duty paid, for immediate shipment from abroad. It was not confirmed.

Philadelphia

PHILADELPHIA, Sept. 13, 1923.

Spot trading seems somewhat quiet, owing to the fact that pretty much every consumer is under contract, getting their supplies direct from the works, and shipments so prompt that there is very little necessity for spot parcels. The volume of deliveries on contracts continue very heavy and a good business for the balance of the year as expected. Makers are not very enthusiastic about taking on long contracts at the old figures, owing to the increased costs of production.

SODA ASH.—Up to present writing there is no change in figures. Contracts for light, 58 per cent. in bulk, $1.33; in bags, $1.45 to $1.50, and in barrels, $1.69 to $1.81. Dense bulk, $1.42; bags, $1.51, and barrels, $1.75; all f.o.b. works, with the usual advance of 5c. per 100 pounds for single cars for prompt shipment. On spot jobbing parcels continue to be quoted at $2.12½ in bags, and $2.37½ in barrels.

CAUSTIC SODA.—Works are kept busy getting out shipments on schedule, and withdrawals on contracts are well up. Contracts can still be had at $3.16 per 100 pounds flat, f.o.b. works; with spot cars for immediate shipment held at 10c. per 100 pounds advance. Makers are rather chary about commiting themselves far into the future, owing to the advance in costs of production. Contracts for ground, flake and powdered continue at $3.60 in drums and $3.85 in barrels, f.o.b. works, with the usual 10 points advance for single cars.

BLEACHING POWDERS.—Has shown very little activity since last report, and prices are soft, with makers feeling that a turn is due. With the cooler weather an improved demand is looked for and a probable advance in price. At the moment large drums in carload lots are obtainable at $1.75 to $1.85, or even a shade less, f.o.b. works. Spot parcels are held at $2.20 to $2.30, according to freshness.

SAL SODA.—Domestic makers continue firm at $1.15 to $1.25 for prime crystals in barrels in carload lots or over. Jobbers quoting $1.25 to $1.40 with limited supplies to draw from.

NITRATE OF SODA.—Recent arrivals have all been cleaned up. Further arrivals, beginning October, continue quoted at $2.42 to $2.42½ for 95 per cent., with an increasing schedule of $2.43 for November, $2.45 December, $2.50 January, and $2.52½ to $2.58½ the following five months of next year, with the usual advance for 96 per cent. Consumers are well supplied from recent arrivals and take very little interest at the moment.

Priestley Medal Bestowed on Dr. Ira Remsen at Milwaukee

MILWAUKEE, Sept. 13, 1923.

The Priestley Medal, awarded triennially for outstanding achievement in chemistry, was bestowed upon Dr. Ira Remsen, president emeritus of Johns Hopkins University, at a public ceremony yesterday in connection with the five-day meeting of the American Chemical Society here. The exercises were held at Marquette University.

Speakers included Dr. Edwin C. Franklin, of Stanford University, president of the society, and Mrs. Thomas G. Winter, president of the General Federation of Women's Clubs. Representatives from leading colleges and universities attended as well as many members of the chemical society.

Dr. Ira Remsen was born in New York, February 10, 1846. He was graduated from the College of the City of New York in 1865, and from the Medical School of Columbia University in 1867. From 1901 to 1912 he was president of Johns Hopkins. Dr. Remsen has a Ph. D. degree from the University of Gottingen, and has received the LL. D. from Columbia, Princeton, Yale, Toronto, Harvard, Pennsylvania State College and the University of Pittsburgh.

He is a past president of the American Chemical Society, and has been honored by learned societies here and abroad. He is widely known as an author of textbooks. In chemical science he has long been notable for the researches he has carried out. Dr. Remsen, it is said, came into American chemistry during its formative period when leadership counted for most. His career synchronizes with the development of chemistry in this country, in which he has figured as investigator, writer, editor, teacher and university president. He has never taken out a patent or turned his hand to commercialize any of his discoveries, and has always taught pure chemistry, yet few men have had so great an influence on applied chemistry.

French Chemical Trade Calm

WASHINGTON, Sept. 12, 1923.

The French situation in heavy chemicals was calm during August, with little change in prices, according to a cable review from Commercial Attache Butler, at Paris, to the Department of Commerce, who says:—

Secondary chemicals were relatively active. Glass-making industries were dull. Tannery stocks are small.

The dyestuffs situation is calm, and there is a slack demand for paint-making materials. Naval stores are keen and prices lower.

French manufacturers will probably be unable to meet next season's demands for sodium nitrate, and stocks of nitrate of lime are lacking..

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Botanical Drugs

(Continued from page 56)

as offerings were none too large and inquiry was a bit more active.

JABORANDI.—Lack of demand and a liberal spot supply has developed sufficient competition among holders to drop values to the basis of 15c. to 16c. per pound.

LIVERWORT. — This article was confirmed by three dealers at 20c. per pound, although other quarters felt that higher prices were warranted.

LOBELIA. — Two reliable dealers quoted 18c. per pound. Other quarters equally reliable named upwards of 22c. per pound. The country price is high, and is said to justify higher spot prices as goods cannot be readily replaced.

PRINCE'S PINE.—From a nominal market the spot has become able to offer a small quantity of prompt delivery material, the price being 35c. to 37c. per pound. This was possible because of the arrival of a long delayed contract delivery from the country. Sales have been liberal and only a few hundred pounds remain.

YERBA SANTA.—Spots held at 10c. to 12c. per pound, according to seller, and goods to arrive were offered at 9½c. per pound. Some selling in both position was reported, but on the whole the market was far from active.

Roots

ACONITE. — U.S.P. goods were quoted 45c. to 50c. per pound with some stocks put forward on the basis "if, and when released." The call was limited.

ALETRIS.—Supplies are in strong hands and the recent advance in helonias has also been an influence in sending prices up to 60c. to 65c. per pound. Offerings are meagre.

BETH.—Stocks are very light. One dealer named 22c. per pound last week, while another prominent seller refused to entertain less than 25c. per pound. Others were unable to quote at all and reported a strong primary market.

BLOOD.—This article was confirmed at 14c. to 15c. per pound, showing an advance of 1c. over the price named in the previous week. Two houses named 15c. minimum.

COHOSH.—Blue root on spot was scarce. But two holders existed and one of them asked 16c., the other 18c. per pound. In contrast a prominent house able to offer nothing but goods to arrive quoted 19c. to 20c. per pound. At that, sales have been slack, according to one quarter. Black root has been advanced to 13c. to 14c. per pound, two dealers offering at the inside price.

CRANESBILL.—Prices named at 10c. to 11c. per pound were confirmed last week, although some quarters believed that values should be higher, due to the cost of further replacements.

CULVERS.—Stocks were very narrow, and nothing at the close of last week was available under 32c. to 34c. per pound. Not a great deal could be had at the inside figure, and many considered the true market to be 33c. per pound.

DOGGRASS. — Cut material was named by one house at 11½c. per pound, but others wanted 12c. to 13c. per pound, and were fairly firm despite its conservative trading interest on the part of consumers.

GALANGAL. — This material has moved up to 7c. to 9c. per pound, due to the limited spot supply and the relatively small offerings from the country. Such material as is offered comes at relatively higher prices, it was said.

GOLDEN SEAL.—The market has continued to decline. First hands have recently sold at $3.30 per pound, and dealers now openly quote $3.50 to $3.60 per pound for whole root. The trend is downward, due to the increase in primary market stocks.

LADY SLIPPER. — Two dealers named 50c. per pound, while a third refused to shade 55c. per pound. Another quarter was considering purchase here rather than in the country, where prices make the local selling levels rather attractive.

MANDRAKE.—Prices in the country have gone up to 18c. per pound, and spot dealers have followed the movement up by advancing to a minimum of 20c. per pound. Conditions all favor a continued advance, it was said.

SKUNK CABBAGE.—There is pronounced scarcity of this material, and at the close of last week there was virtually but one spot lot, and for that 15c. to 16c. per pound was wanted. The country has little stuff to deliver.

SPIKENARD.—A sale of a few hundred pounds was made at 21c. per pound last week, and although some goods are now on the way which may be had at the same price, it is doubtful that anything spot could be had under 23c. to 25c. per pound. The holder of the greatest quantity available wants 25c. per pound. The country offered little and only at high prices.

STILLINGIA. — Two dealers named 12c. per pound and another quarter wanted 13c. per pound minimum. This was another material about which the country sellers had strong ideas.

Seeds

ANISE.—Spanish on spot held at 19c. to 20c.; new crop for August-September shipment was named at 16½c. to 17½c. per pound. Star was unchanged at 12½c. to 13c. per pound, spot, and 12c. per pound afloat.

CARAWAY.—Scarcity of spot goods couped with the advance abroad have brought prices up to 24c. per pound, although some believe the movement is being overdone. New crop for September shipment was cabled at 21½c. per pound; September-October, 22c. to 22½c. per pound.

CELERY.—This was the leading article last week. After declining to a relatively low figure and remaining in poor demand, interest opened last week and buying drove values to 21c. to 22c. per pound.

CONIUM.—Small demand existed, but prices were nominally higher at 13c. to 15c. per pound, as to seller and quantity.

DILL.—Natural seed was quoted at 5c. to 6c.; cleaned, 8½c. to 9c. per pound. Demand was fair and showed promise of expansion.

FENNEL.—French seed was nominal at 16½c. per pound. Indian seed, according to quality and seller, was priced at 10c. to 12¼c. per pound. The 10c. stuff is only fair in quality.

POPPY.—Prices have held firm with a rising tendency. Dutch was noted at 11c. to 11½c.; German, 10¼c. to 11c. per pound. Prompt shipment from Holland was offered at 10⅝c. to 11c. per pound.

QUINCE.—Nothing on spot could be had under 30c. per pound last week if quality was a factor in business. Neither is there much, if any, consigned material to be picked up. Spanish shippers wanted in the neighborhood of 90c. to 95c. per pound. An arrival of red Cape seed was noted and sales were reported made liberal at $1.05 to $1.10 per pound, as to quantity. Indian seed for shipment was priced at about 80c. to 85c. per pound.

Spices

CASSIA.—Trading was listless and demand was limited to jobbing needs. Prices were unchanged as follows:—Batavia No. 1, 10¼c. to 10½c.; short-stick, 9½c. to 10c.; Batavia No. 3, 9¾c. to 10c.; No. 1 Saigon rolls, 23c. to 26c.; China, selected, rolls, 9¼c. to 9¾c.; broken selected, 5¾c. to 6c.; extra select, 6½c. to 6⅝c. per pound.

CLOVE.—All reports suggest that this article is likely to prove strong for a long time to come. There is moderate trading in futures, and prices in all positions have been maintained. There are but few operations on the short side of the market. This, with the adverse crop news, is considered a bullish argument. Prices were noted up to 29½c. to 30c. per pound.

MACE.—Demand held strong, and supplies were mighty scarce. Quotations were:—Banda No. 1, 53½c. to 54c.; Penang No. 2, 51c. to 52c.; Batavia No. 2, 44c. to 45c. per pound.

PEPPERS.—This market was much more active and spot needs have reduced spot supplies sharply. Foreign markets were buoyant, which was also a factor in supporting local prices. The Malabar crops are reported by cable as likely to be seriously curtailed. Prices were:—Black, Singapore, 10½c. to 10¾c.; Aleppy, 8¾c. to 9c.; Lampong, 9c. to 9¼c.; Tellicherry, 9⅛c. to 9½c.; white, Singapore, 14½c. to 14¾c.; Muntok, 14½c. to 14¾c.; red, chillies, Japan No. 1, 29c. to 30c.; Mombassa, 16c. to 16½c.; Talay, 14½c. to 15c.; capsicum, Bombay, 12½c. to 13c. per pound.

PIMENTO.—While spot prices held unchanged at 5c. to 5¼c. per pound, the article was in wider request all around. The crop is reported small and spot supplies are limited.

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Inquiry for Phenol, but Little Actual Buying—Cresylics Dull and Easier—Benzyl Chloride Available

Inquiry for basic products was general last week, but little business resulted from the manifested interest of buyers and the volume of orders placed did not exceed those of the previous week. The most significant development of the week was the Western interest in phenol. Toward the end of the previous week, following the Japanese disaster, a rush of telegrams came to factors in phenol in this market, and this continued for the good part of last week. These inquiries were for prompt shipments direct to the coast, and it was apparent that dealers and exporters there expected a big foreign demand. Prices in this market did not present as attractive values as had been expected, and consequently little business has been done. Leading makers were better stocked than at any time earlier this year, but the market has established itself on a firmer basis and there was no incentive for lowering prices, as the routine has picked up and more local inquiries indicated that factors would not have to go so far afield as the Pacific Coast to find buyers.

Cresylic acids were neglected. Supplies were generously distributed and the price was weak. Demand should be better at this time of year, if former years can be taken as indexes, but so far there has not been the glimmer of an improvement. At no time in the past six months have stocks been so good or so low in price. Toluene, however, has been moving excellently well, and there has been a better feeling in xylenes, cresol and solvent naptha. All of these were firm in tone, due to the fact that stocks were not overly large and production was light.

Some intermediates began to pick up, but on the whole the market showed little gain over the preceding week. The interest merely shifted and the aggregate of business remained stationary. Supplies of benzyl chloride were obtainable in free volume, one maker being sufficiently stocked to handle all the domestic business that was presented, as well as foreign, if and when any may develop. Prices were on an attractive basis. It is expected that there will be a new factor in benzaldehyde within the next month, and that his prices will offer something for consumers to think about. At the moment there is only one source of supply, and that has been closed for at least two weeks, due to the excess of demand.

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Cresylic acid, dark, 5c.
Naphthalene, crushed, ¼c.
Pyridine, 25c.
Neville & Winther's acid, 10c.
Sodium naphthorate, 5c.

Index Number—20 Products

The following index numbers have been compiled from 20 representative crudes and intermediates, and give an indication of the present situation. The normal is based on the prices of August 1, 1914:—

Normal—12

Last week.	Prev. week.	Last month.	Last year.
28.6	28.6	30.3	27

Basic Products

ANTHRACENE. — Conditions here have undergone little modification in recent weeks. There has been little demand from any source, even the regular consumers having kept their purchase down to the minimum. Stocks were in adequate volume, but were not any better than usual at this time of season. Leading producers have been trying to hold down as much as possible, and have not accumulated a great deal of any grade. Some resale material has come to hand latterly, but stocks were not large and were irregularly obtainable. Much lower prices have been heard on this resale material than prevailed in first hand quarters. The makers quoted from 75c. to 80c. per pound for the 80 per cent.; 12c. to 15c. for the 40 per cent., and 11c. to 12c. for 25 per cent. Resale 28 per cent. was 5c., and even that might have been cut some on the right sort of business.

BENZOL.—Trading was along quiet lines. The market did not show any signs of picking up after the holiday, and factors reported unusually quiet conditions. The resale market was particularly slow, for first hands at least were taking care of some contract requirements and shipping goods on these accounts. But the dealers did nothing the whole week but mark time. Quotations were maintained in the face of the dullness and the fact that stocks were better now than they have been any time previously this summer. Production has shown some decrease but that was only natural at this time of year. Stocks on hand were ample to meet all requirements of consuming trades for some time to come even if production was much more reduced than it has been. The contract prices were unchanged and makers were generally offering prompt shipments from works at the same levels. These prices were 25c. to 30c. per gallon for the 90 per cent., and 27c. to 32c. for the pure, depending on the container. Spot goods were offered by dealers about 1c. over these prices.

CARBAZOLE.—Stocks were small and were narrowly distributed among a few makers. There has been only a small demand for this material at best and production has been kept down to the minimum levels. Such as is made has been absorbed by consumers as readily as produced. First hands controlled the situation and quoted at 75c. to 80c. per pound.

CREOSOTE OILS.—The market has not yet shown any signs of picking up. Stocks remained small and were to be had from only a few sources in any quantity. Spot holdings were extremely restricted, with hardly any of the dealers able to offer any, and then only in an irregular fashion. Prices have been well maintained under the circumstances, and conditions surround production were such as to indicate that current levels would be maintained for some time to come, if not actually exceeded when the demand gets to more seasonable levels. As it is, factors have been waiting for a revival of demand which usually comes at this time of year. Scattered inquiries led to the belief that this demand would be along soon. Quotations ranged from 24c. to 26c. per gallon for 15 per cent., and 34c. to 36c. for 25 per cent.

CRESOL.—U.S.P. was meeting with a good demand. Interest of consumers has not yet extended to any very large quantities, but demand for small lots was quite brisk at times. Domestic was being produced steadily, but stocks on hand at the moment were not overly large. Still, there was enough to meet the requirements of the consumers. Imported material was also in evidence, but was getting scarcer all the time inasmuch as the replacement cost was so high that few dealers would consider it. Consumers could get domestic at 25c. per pound upwards, according to quantity; while the replacement cost of foreign was 28c. to 30c.

CRESYLIC ACIDS.—Demand was irregular and not so good as recently. Stocks were larger than in the past and each weeks sees further additions to them, due to the refining of the low grade distillates which have been imported and which continued to come in in some volume last week. Spot holdings of cresylics were larger last week than any time previously in the past three months. At the same time demand was less sustained and smaller. This naturally has resulted in keeping the tone extremely easy, as consumers felt that there was no need of buying under the circumstances. The odds were that a continuation of this state of affairs would only react in their favor, and most of them were disposed to wait and see if it did not. Quotations were easier in tone, if not much actual change was made in the selling prices. From 75c. to 85c. per gallon was quoted by local dealers depending on the quality of the acid. Other refiners quoted at $1 for the 97 to 99 per cent. guaranteed light. The domestic maker remained out of the market being sold ahead for some time to come. His contract price was understood to be in the neighborhood of 70c. for the light.

NAPHTHALENE. — Flakes were easier at 6¾c. to 7¼c. per pound and in no demand. Stocks on spot were in some volume and appeared to be widely scattered. This has increased the

XYLENES—Small stocks have been offered on spot. Such a thing as a car lot has not yet appeared, however, and even makers were able to take care of only limited business. Demand has been well up to the average. Consumption of this crude is more or less fixed and production does not exceed certain limits. Quotations were from 60c. to 65c. per gallon at works for c.p., while spot goods in drums were 75c. The commercial was 29c. to 34c. at works, with none offered on spot at all.

(From Oil, Paint and Drug Reporter, August 20, 1923)

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 6; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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weakness of the tone, as competition was keen. Balls were quoted from 8c. to 8½c. per pound. No demand at all was indicated. Refiners have been willing to sell the flakes and the balls at lower prices than they quoted, as demand has been slow and competition between them keen. This was reflected in the spot situation. Intermediates were not picking up to any appreciable extent, and so makers were not looking for the chipped. The price promptly declined to 5¾c. to 6c. per pound. Crude was from 2c. to 4c. per pound depending on the quality. Importations of English continued and the shipment price was hardly as high as recently. Domestic was offered in some volume occasionally, but has frequently been of inferior quality and commanded a low price.

ORTHO-CRESOL.—Stocks were small at best, and demand was somewhat better than formerly. The market began to take on a more seasonable appearance. Domestic was in small supply and production has not been heavy in the past. Factors were just about meeting the requirements of consumers, but these were not up to the mark as yet. Inquiry has shown an increase, and small lot orders have been more frequent. Imported material was still around, but none was being brought in any more, on account of the extremely high price. Quotations were from 30c. per pound for domestic, while 34c. was asked for foreign.

PHENOL.—The local market for U.S.P. phenol showed much more life last week, as the result of large inquiries from the West. The gain in inquiries began to manifest itself late during the previous week and continued heavy all during the early part of last week. This inquiry was all from the West and was the result of the Japanese disaster. The inquiry came from factors on the Pacific coast and applied practically every time to prompt shipments. It was evident a strong export demand was anticipated there. Not much business has resulted from these inquiries, however, as prices in this market did not prove as attractive as it was hoped by the westerners they would. Demand, as far as the spot was concerned, was flat. Makers quoted synthetic at 28c. to 30c. per pound, while natural was held by the sole maker at 28c. at works, but he was sold ahead for some time. Resale material was not to be had any cheaper.

PYRIDINE.—An easier feeling developed and spot goods were from $4 to $4.50 per gallon last week. The shipment price has also yielded somewhat and was quoted at $4.25. Demand has been slow and the market was without much feature aside from the weakness which followed the lower replacement cost and was the result of the competition between local dealers. Stocks held were small, but the prospect of larger supplies in the near future and the slowness of demand precipitated the competition.

SOLVENT NAPHTHA.—Demand was good and stocks were not large, so that there has been some difficulty in all consumers securing supplies. No resale material has been available for a long time, and dealers claimed to have orders on their books that could not be filled. First hands have been sold ahead for the most part, and have been unable to fill any orders than those of their regular customers who had contracts with them. Quotations have ruled steady all summer and conditions surrounding production were such as to indicate that they would be upheld for the near future also. The water white was 27c. to 32c. per gallon, depending on container; and the crude was 24c. to 29c.

TOLUENE.—Demand has been excellent and has been maintained. The movement was better than any time previously this year and stocks were good, so that consumers have not had much trouble in getting their requirements filled. The price, too, has been held steady, and spot goods were not priced any higher than makers were asking, so that dealers have been able to do well on their holdings. Quotations were 30c. per gallon for c.p. in tanks, and 35c. for drums. Spot in drums were 38c.

XYLENES.—Production has been kept down to levels of consumption, so that there has been no undue accumulation of supplies. First hands controlled the situation, and little has been obtainable from the dealers in recent months. Prices were steady at 65c. per gallon in drums at works for the c.p., and 29c. to 34c. for the commercial. Odd lots of c.p. on spot have sold at 75c. in drums, and some such lots were to be had last week from one source at least.

Coal Tar Acids

ANTHRANILIC.—There were no changes in the prices of the leading makers. The market has not shown much sign of life recently and conditions last week did not show much improvement over the run of recent events. The makers continued former quotations and stocks of refined were in better volume than technical, for the simple reason that there has been more consumptive interest in the refined grade and factors have been prepared for it. The refined was $1.30 to $1.35 per pound; while technical was 95c. to $1.

BENZOIC.—Demand was pronounced and the spot market was rather tight when it came to supplies of the U.S.P. The technical, not being in much demand, was much more plentiful than the U.S.P. and also distinctly easier in tone. The U.S.P. was quite firm on account of the excellent demand and the fact that makers in some cases were sold ahead for the next couple of weeks or so. Quotations on U.S.P. were 85c. to 90c. per pound; while the technical was 65c. to 70c. Some resale technical has been noted around 65c.; but no resale U.S.P. was in evidence, and the position of makers and the big consumption made it unlikely any would be for some time.

BETA-NAPHTHYLAMINE.—The market jogged along quietly at $2.30 to $2.35 per pound, with hardly any stocks around, and no one engaged in production at the moment. Demand has been extremely light all summer and with practically no production, even the little demand has reduced stocks to the vanishing point.

CLEVE'S.—The market was irregular and prices were generally a matter of arrangement between buyer and seller there being no real market levels. Sales were made at $1 per pound recently, while up to $1.15 has been quoted. Stocks were in some volume in first hands, and the extreme dullness has resulted in the unsettled tone.

CRESOTINIC.—None was to be had in the local market. Quotations have not been available for some months now, and stocks were exhausted. The reason for the bare spot market was the fact that demand last winter was so poor it didn't pay to make the acid, and its production was dropped.

GAMMA.—Demand was along quiet lines. Occasional large lots have moved, but most of the consumptive interest was confined to small quantities. Prices were from $1.50 to $1.60 per pound, representing a sharp decline for former levels. The lower prices were the result of the dullness and the competition between first hands.

H.—Sold at 70c. per pound in a big way according to report, although first hands continued to quote at 75c. to 80c. per pound. Demand was somewhat poorly sustained, and the market was unsettled in tone. Stocks were generous, although not much has appeared in second hands.

LAURENT'S.—Was in very short supply and prices high at 90c. to 95c. per pound. Demand was nothing much.

NAPHTHIONIC.—More inquiry for this material was noted and the market has shown quite a good improvement during the past week or so. Quotations were maintained on the former levels, and supplies were not widely distributed, so that first hands did not care to modify them any to suit reluctant buyers. The refined has been in less request than technical and stocks of it were much smaller, as it has not been produced to the same extent as the technical. The price of technical was 55c. to 60c. per pound; while the refined 65c. to 70c.

NEVILLE AND WINTHER'S.—Down to $1.15 per pound has been done on recent business. Quotations ranged from that level to $1.25 per pound. Resale material was conspicuous by its absence, but there has been plenty available from first hands.

SALICYLIC.—Demand for U.S.P. continued good and some makers were temporarily short of supplies. Quotations were 35c. to 40c. per pound, depending on quantity. The technical was more abundant that U.S.P. and has been offered by the dealers at low prices. Quotations generally ranged from 30c. to 33c. per pound.

SULFANILIC.—Weak and neglected at 17c. to 20c. per pound, the market was without feature of any sort. Stocks were much in excess of current requirements of consumers and this was one of the intermediates in which there has been far too much production for the health of the situation.

Intermediates

ALPHA-NAPHTHOL.—The spot market was not so largely supplied as previously as one factor has withdrawn. Stocks were still to be had,

(Continued on page 86)

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Dyestuffs and Tanstuffs

Importation of Albumen Heavy—Spot Market on Par with Replacement Prices—Tanning Materials in Demand

Heavy importations of albumen continued all last week, and something like 200,000 pounds were received. Even heavier shipments are on the way, and it is expected that a great deal more will be brought in this fall than was received last year. Chinese production was hardly up to normal this summer, but it was decidedly better than last season, when there was an actual shortage. Prices remain high, however, and the liberal stocks of dealers will have little effect on the tone of the market unless something unforeseen develops. As it is, the spot market is on a par with shipment costs. Offerings in the primary market will hardly gain as time passes, and no one doubts that high prices will be the rule.

Tanning materials continued to attract more attention from buyers than any other section. The extracts and the raw materials from which they are made excited interest. Chestnut and hemlock extracts were recently advanced, and other extracts were in such a strong position that the trade believes that advances will be made shortly. The problem of securing adequate supplies of wood for conversion into extract was the main factor in advancing prices. Higher prices have been paid for valonia, divi divi and myrobalans, while nutgalls have advanced in the primary market. These tanstuffs have been imported more generously lately, and further shipments of divi divi and valonia are expected. Comparatively little of these are offered by dealers locally, and practically everything brought in recently has been on consignment.

Chemicals presented little of interest. Yellow prussiate of potash was sharply lower and the soda salts eased off a little. The reduction in the price of the potash prussiate occasioned no surprise. The shipment price was much lower, and the fact that importers have sold goods cheaply for arrival this month precipitated more comparative spot prices. Competition all round was extremely keen, with spot holdings in rather ample volume for present consumptive requirements. Bichromates were unsettled, but none of the producers made any changes in prices, although it was admitted the quoted levels were not very faithfully adhered to when business offered.

Advanced

Divi divi, $1. Valonia, $5.

Declined

Nutgalls, Chinese, 1c. Potash, prussiate, yellow, 3c.
Soda, prussiate, ¼c. red, 1c.

Index Number—19 Natural Dyestuffs

The following index numbers have been compiled from nineteen natural dyestuffs and extracts and give an idea of the present market situation. The normal is based on prices prevailing on August 1, 1914:—

Normal—11

Last week.	Prev. week.	Last month.	Last year.
18.2	18.2	18.1	16.8

Chemicals

ALUMINUM CHLORIDE. — The price of 35 per cent. was unchanged at 3½c. to 4c. per pound. Demand was along steady lines and the market presented little change from conditions formerly outlined in these reports. Stocks were in adequate volume, but little has been moved to the textile trade. Most of the chloride now used is utilized in the oil refining industry and very little is taken by the textile trade. Innovations in processes are apparently gradually eliminating the use of this one time popular chemical.

ANTIMONY CHLORIDE.—Demand for the 65 per cent. salts has been rather better the past few days, but so far the market has not shown much real activity. Textile mills have only got started again after the summer quietness and have not been in the market as yet for any large amounts of raw materials. Stocks of imported 65 per cent. salts were to be had freely on spot, any of the dealers carrying goods. Prices were from 22c. to 25c. per pound for the most part. Domestic makers were doing nothing and held their price nominal at 28c. at works.

POTASH, BICHROMATE. — The market was extremely quiet throughout the whole week. Trading was at a standstill more often than not. Prices were fairly steady under the circumstances and none of the makers made any quotable alterations, although it was admitted that the price had been shaded on some occasions. Production was along light lines and some plants were still operating at a low gauge. The export situation was also poor, and aside from some European inquiry nothing transpired. Makers asked from 10c. to 10¼c. per pound at works, but somewhat less has been reported on one or two orders. The resale market was poorly stocked and prices offered little inducement to buy therein.

POTASH, PRUSSIATE. — Yellow prussiate was sharply lower last week and spot goods could be had at 30c. to 32c. per pound. Demand was poor and the market offered little of interest aside from the break. Lower shipment prices have been offered, and it was possible to secure shipments over the balance of this month as low as 28½c. duty paid, which made a spot price of 33c. look rather strange. Competition on spot was extremely keen and stocks were of some size. The red prussiate was quoted at 60c. to 62c. per pound, but was very dull and the continued declines in the yellow have had an inevitable effect on the tone. Under the circumstances, it was not difficult to secure modifications on individual orders.

SODA, BICHROMATE.—The market was quoted at 7¾c. to 8c. per pound. The tone was rather easy, and it was admitted in prominent producing quarters that the quoted prices were being departed from frequently. Business was poor throughout the whole week. Towards the close of the period there was some improvement in inquiries but the week did not show up very well in contrast with some recent periods of trading. Stocks were in some volume, although production was still kept down and in some cases plants were running at only 50 to 60 per cent. of capacity. Resale material was not plentiful and the prices that dealers were quoting did not offer much inducement to consumers to place their orders outside of the regular channels.

SODA, HYPOSULPHITE.—Trading was along fair lines only and hardly so active as was the case recently. The low prices which have been quoted for imported have not had any effect in encouraging buyers. Domestic makers continued to move fair quantities on contract. The ordinary crystals were $2.50 to $3 per 100 pounds; pea crystals, $2.75 to $3.25; and granular, $3 to $3.50.

SODA, PRUSSIATE.—Was weaker at 13¾c. to 14c. per pound, and 13½c. not out of the question on the right sort of business in some quarters. Demand was irregular and poorly maintained, and spot stocks were fairly large and widely distributed. Domestic makers offered at 14½c. at works, but have done no better than the dealers when it came to business. Consumers have not been in the market recently, the explanation being that the bigger ones were under contract with English firms and were getting supplies as needed from those sources.

TURKEY RED OILS.—Have been in good demand during the past week and prices were steady at former levels. The 50 per cent. was 9c. to 12c. per pound; and the 75 per cent., 12c. to 13c.

Natural Dyestuffs

ALBUMEN. — Importations during the past wo weeks have been enormous. This is the time of year when the Chinese crop of egg albumen begins to reach the market in good volume. Local importers have been buying extensively during the past two months and shipments have now begun to arive. Several hundred thousand pounds were brought in last week and more is expected during the next two. The spot market remained very steady despite the inrush of goods and leading dealers made no changes in

Prices not otherwise designated are spot, New York, for large quantities. Detailed prices current in this market will be found on page 8; latest market developments on page 2.

To get a complete picture of market conditions consult the Oil, Paint and Drug Reporter analysis of market trends in this issue, pages 44F to 45.

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their quotations. The dullness which enveloped albumen during the past couple of months brought prices down to low levels, and the present replacement costs were so near to the current spot prices that dealers could not afford to lower them. The best on shipments last week, duty paid, was around $1 to $1.05 per pound, and with so much already taken from the Chinese market little remained to be secured by the exporters. Local demand has not been heavy, but was better than previously, and sales of edible grades were made at $1.05 to $1.10 per pound, depending on quantity. Some factors insisted on $1.06 inside and would not shade. Technical was difficult to locate, real technical grades being almost off the market. Most of the stuff sold as technical was really off grade edible or old goods carried over from last year. Blood albumen was dull with the price from 45c. to 55c. per pound.

ANNATTO.—Small shipments of annatto seed were noted, amounting to about five bags received here. Stocks held on spot were small and confined to one or two sources. The price ruled high and the fact that there was practically none available in the primary markets for export has given the local market more firmness than might otherwise have been the case. The price was 16c. to 17c. per pound. Fine annatto was 34c. to 36c. per pound, and in usual routine request. Stocks were relatively better than in seed.

COCHINEAL. — Demand showed some improvement and factors reported a little more buying than previously. Sales continued to be small in volume, individual orders comprising only a bag or so. But the indications of a reviving demand were construed optimistically and a much better feeling was noted. Spot stocks were in adequate volume to take care of whatever demands might arise, and prices were steady at former levels of 32c. to 33c. per pound, for both the Teneriffe silver and the gray black.

CUTCH.—Borneo cutch was to be had on spot in a small way at 4c. to 4½c. per pound, although there was little offered at 4c., most sellers asking from 4¼c. The replacement price was 3½c. c.i.f., and anything less than 4¼c. did not allow of any profit. Demand has been better. Most of the big consumers have placed orders in the primary markets to secure supplies regularly over the rest of the year, so that importations here, while of some extent, have really had little effect on the spot market. Shipments invariably moved direct to consumers. The Rangoon was nominal. Nothing was available on spot and a nominal price of 15c. to 16c. prevailed.

DEXTRINE.—There were no changes in the quotations of the leading domestic refiners of corn last week, and dextrines were available at former levels. There has been a good demand recently and the market was much more active than in the past. The plants have begun to operate more freely, and the consumption of corn dextrines, at any r ate, has shown a good gain. The price of ordinary yellow was $3.69 to $3.86 per 100 pounds; while British gum was $3.99 to $4.26. Potato dextrines were not very lively, the imported appeared rather more steady in tone, and the price was maintained at 7½c. to 8c. per pound, which was the same price the domestic was offered at.

DIVI DIVI.—Some divi divi was received last week, but it moved directly to a consumer. Spot stocks in dealers' hands were not large, and the price was high. Consumers were asked to pay $40 per ton for spot goods and little to be had at that. Shipments were $39 for the most part, and there has been considerable interest in them. European demand has been good and this has resulted in forcing up shipment prices. European buyers have been willing to pay more in the primary markets than Americans and this naturally has swung business their way. It did not appear, however, that local users would have any difficulty in getting as much as they wanted.

GAMBIER.—The spot market began to show more signs of life last week, the result of an increased inquiry on the part of silk mills and some little buying from the same source. Not very much has been done by the tanneries as yet, and it is expected that it will be a few weeks yet before these consumers are in the market for gambier. Spot stocks were not large, and shipments were not coming in very freely, as there has not been a great deal available for export from the primary markets. Prices, too, were on the high side, and factors stated that spot prices were as low as they could be with the replacement costs so high. The common was quoted on spot from 8c. to 8½c. per pound; while the plantation was 9½c. to 10c., and not as plentiful as the common. The Singapore cubes, for which there has been inquiry, were not to be had at all. The primary market was pretty bare, and none of the importers here could get hold of any for shipment.

INDIGO.—The market was thoroughly nominal. There was only one holder of spot goods, and he carried two grades, the Madras at 85c. to 90c. per pound and the Manila at $1.30. There was no demand, and there has not been for the past six months.

MADDER.—Dutch was not moving at all well. The price was maintained at former levels of 27c. to 28c. per pound, with spot stocks in small volume.

MYROBALANS.—Practically all the shipments coming to hand at the present time have been sold to arrive, and consequently very little has been offered in the local market. Shipments have been received here more or less regularly in recent weeks, but quantities in each instance have been rather small. Spot stocks last week were not large and were not widely distributed. Few of the regular dealers had any at all. The best prices that have obtained on the J's has been $36 per ton for the one's, and $27 upwards for the two's. Shipment prices were about the same.

NUTGALLS.—Rather quiet conditions prevailed in this market, and not much interest was shown by consumers in either spot goods or shipments. Quotations for Chinese galls ranged from 11c. per pound for ordinary to 12c. to 12½c. for plums. Most of the interest here was in the Blue Aleppo galls, which were not very readily obtainable and which were quoted from 16c. to 17c. per pound.

SAGO FLOUR.—The price was 3½c. to 4c. per pound. Spot stocks were in good volume and the tone seemed steadier than previously, the result of the better inquiry. Buying was still irregular and confined to small lots for the most part, but it was certainly better than previously, and the tone reflected the improvement.

STARCH.—There were no changes in the quotations of the leading producers of corn starches last week, and sales were reported on the previous basis. There was an excellent demand for all grades of corn starches, and the tone was quite steady. Plants were running better and conditions were altogether better. Powdered was quoted at $3.12 to $3.39 per 100 pounds; while pearl was $3.22 to $3.49. Other starches were hardly as active as corn, and prices were held at former levels, although weak holders occasionally appeared. Imported potato was 5c. to 5½c. per pound; while domestic was 4½c. to 5c. Wheat starch was 6c. to 7c., and rice, 9c. to 12c.

TAPIOCA FLOUR. — Demand has been along steady lines, and the market was generously stocked, so the price has remained at reasonable levels. Replacement costs have been maintained, but were hardly as high as in the past, and the competition on spot has increased the possibility of securing unusual lots at a somewhat cheaper price. The range on good grades was 5½c. to 6c. per pound; while inferior grades were from 5c.

VALONIA. — Arrival of something over 1,500 bags was noted last week. This was not offered in the market, but was moved direct to a consumer. The spot market was practically bare of goods, but demand was good and numerous shipments have been engaged. Goods were on the way in large volume, and the possibility of obtaining this tanning material after it has been off the market for a long time has resulted in a rush of buying. The price of beards was $50 per ton for shipment, while the cups and beards mixed were $40.

Dyewoods

Little of interest has developed in any of the dyewoods recently. Some importation of the logwood sticks has occurred, but that was the extent of the activity in this field. None of the local dealers have wanted to bring in dyewoods, because of the poor market for them. Extract makers have not been in a position to require raw materials, consequently they have not done much. Prices were all on the high side, although in many instances these prices could be shaded when firm orders were shown. Brazilwood was quoted at $35 per ton for shipment; while fustic sticks were $30 to $35. Logwood has sold at $24 per ton, but the general shipment price was from $25 to $28, depending on quantity and grade. Ground red sanders bark was 18c. to 20c. per pound on spot, and so was ground camwood. Neither was plentiful, and neither has been in much demand in recent months.

Extracts

ARCHIL.—Demand was along better lines during the week, but sales were individually small. Stocks on hand were adequate to meet the increased demands and prices were unchanged from former levels. Concentrated was 17c. to 20c. per pound; and double, 15c. to 17c.

CHESTNUT.—With tanneries running again at a good clip, demand for tanning materials has broadened. Stocks of extracts were not large, and the scarcity of raw materials has kept prices firm. The increased demand has had a further strengthening effect on the tone. The 25 per cent tannin was 2¼c. to 2¾c. per pound in tanks, and 2½c. to 3c. in barrels.

FLAVINE.—The market was steady in tone, with prices 80c. to 90c. per pound. Supplies were controlled by first hands, and these factors have been able to find a sufficiently good consumptive outlet for their supplies to prevent the accumulation of any surplus stock.

FUSTIC.—The market was along rather more quiet lines, and prices were somewhat easy in tone. None of the makers have made any changes in the schedule, but it was an open secret that it was not being strictly adhered to. According to the schedule the crystals were 20c. to 22c. per pound; the 51-degree liquid, 10c. to 12c.; and 42-degree liquid, 8c. to 9c.

HEMATINE CRYSTALS.—The range on good quality crystals was from 14c. to 20c. per pound. Demand has been along fairly good lines, but makers have had to contend with some resale material of inferior quality which has been offered at a low price.

HYPERNIC. — Standard strengths were not easy to locate in volume, and the position of raw material made for a continuation of the firm tone. The price of solid was 24c. to 26c. per pound, while 51-degree liquid was 9½c. to 10c.

LARCH.—Crystals have been moving irregularly. Some fairly good orders have come to hand lately and quotations were maintained. The crystals were 6½c. to 7c. per pound.

LOGWOOD.—Demand was poor. Trading has been irregular for some time, and domestic makers of the extract have had to contend with imported. The cost of production in this country is great enough to make a considerable differential necessary, and the domestic makers have sought to have the tariff advanced. The price of crystals was 14c. to 16c. per pound; solid, 11c. to 12c.; and 51-degree liquid, 7c. to 8c.

OSAGE ORANGE.—The powdered was to be had at 16c. to 17c. per pound. Supplies were available in only one direction on spot. The liquid was more plentiful, and quoted at 7c. to 7½c. per pound.

QUEBRACHO.—This tanning extract has been in better demand, and prices were firm at the recently attained levels. The solid was 5c. to 5¼c. per pound; and 35 per cent liquid, 3¼c. to 4c.

Trade News Briefs

W. H. Luscher, of the United States Glue Co., Milwaukee, Wis., was a visitor in Chicago recently.

G. M. Willetts, vice-president of Armour & Co., Chicago, was a visitor in New York trade circles recently.

What is said to be the world's largest deposit of radium ores has recently been discovered at Ferghana in Asiatic Russia.

Directors of the Virginia-Carolina Chemical Co. were re-elected at the recent annual meeting of stockholders at Jersey City.

The steamship "Delaware" cleared from Galveston recently with 781 tons of cottonseed cake for Norresundby, Norway.

W. E. Brook, Tephuanec, Mexico, prominent in the naval stores industry of that country, was a visitor in Savannah recently.

The Georgia School of Technology, Atlanta, has introduced a course in ceramics which promises to attract several students.

Kogan-Klein, Inc., druggists, this city, have been petitioned into bankruptcy. Assets are listed at $1,000, with liabilities of $2,000.

John J. Watson, Jr., has been elected president of the International Agricultural Corpn., in place of Stephen B. Fleming, resigned.

John Shaw & Co., 15 Elkins St., **So. Boston, Mass.**

ALIZARINE ASSISTANT TURKEY RED OIL

SULPHONATED RED OIL

SULPHONOLE

A new sulphonated oil with powerful emulsive qualities. One part of SULPHONOLE added to four or more parts of mineral oil gives a clear oil that will make a perfect emulsion in water.

Bids and Awards

Bids Wanted

Carnauba and Ceresin Wax

Norfolk Navy Requisition 127

Bids are wanted at once by the navy supply officer, Norfolk, Va., for furnishing 1,000 lbs. carnauba wax and 1,000 lbs. ceresin wax.

Muriatic Acid

Navy Schedule 1308

Bids are wanted October 9 at the Bureau of Supplies and Accounts, Navy Department, Washington, for furnishing 10,080 lbs. muriatic acid for Puget Sound.

Gasoline

City of New York

Sealed bids will be received by the President of the Borough of the Bronx at his office, Borough Hall, Crotona Park, Tremont and Third avenues, until 11 a.m. on September 20, for furnishing and delivering 12,000 gallons of motor gasoline.

Gasoline, Kerosene, Oils

Brooklyn Q. M. Circular 24-41

Bids are wanted by the quartermaster supply officer, New York general intermediate depot, First avenue and 59th street, Brooklyn, N. Y., September 24, circular 24-41, for furnishing large quantities of motor gasoline, kerosene, fuel oil, engine oil, motor oil, transmission lubricant, dynamo and turbine oil, cup grease and lard oil for delivery at various army posts.

Gasoline Kerosene and Fuel Oil

U. S. Marine Corps, Washington

U. S. Marine Corps, Quartermaster's Department, Washington, September 10.—Sealed proposals, in duplicate, will be received in this office until 11 a.m. September 26 and then be publicly opened for furnishing 2,000 gallons motor gasoline for delivery to marine barracks, Portsmouth, N. H.; 2,000 gallons motor gasoline and 100 gallons kerosene sent for delivery to marine barracks, navy yard, New York, N. Y.; 1,000 gallons motor gasoline for delivery to marine barracks, naval ammunition depot, Dover, N. J.; 3,000 gallons motor gasoline and 100 gallons kerosene for delivery to marine barracks, navy yard, Philadelphia; 7,000 gallons motor gasoline and 500 gallons kerosene for delivery to depot of supplies, Philadelphia; 1,000 gallons motor gasoline and 500 gallons kerosene for delivery to marine barracks, Annapolis, Md.; 7,000 gallons motor gasoline and 100 gallons kerosene for delivery to Washington; 60,000 gallons motor gasoline, 15,000 gallons kerosene and 60,000 gallons Diesel engine fuel oil for delivery to marine barracks, Quantico, Va.; 500 gallons motor gasoline and 150 gallons kerosene for delivery to marine barracks, Yorktown, Va.; 2,500 gallons motor gasoline and 200 gallons kerosene for delivery to marine barracks, navy yard, Norfolk, Va.; 1,500 gallons motor gasoline for delivery to marine barracks, navy yard, Charleston, S. C.; 20,000 gallons motor gasoline and 10,000 gallons kerosene for delivery to marine barracks, Paris Island, S. C., and 14,000 gallons kerosene for delivery to depot of supplies, Marine Corps, naval operating base, Hampton Roads, Va.

Fuel Oil

Chicago Q. M. Circular 24-20

Bids are wanted September 18 at the Chicago quartermaster intermediate depot, 1819 West Pershing road, Chicago, under circular 24-20 for bunker A fuel oil. Alternate bids are requested on 200,000 gallons during October, 1,290,000 gallons delivered between October 1 and February 28 and 2,000,000 gallons between October 1 and June 30.

Camp Holabird Q. M. Circular 6-24

The quartermaster, Camp Holabird, Md., will open bids September 27, circular 6-24, for 17,500 gallons fuel oil.

City of New York

Sealed bids will be received by the Commissioner of Purchase of the City of New York at his office, Room 526, Municipal Building, Manhattan, from 9 a.m. to 10:30 a.m. on September 24 for furnishing and delivering fuel oil to the Fire Department.

Mineral Oil

Navy Schedule 1312

Bids are wanted September 25 at the Bureau of Supplies and Accounts, Navy Department, Washington, for furnishing 30,000 gallons mineral oil for Boston.

Paint

San Francisco Q. M. Circular 24-18

Bids are wanted at the quartermaster section, San Francisco general intermediate depot, September 24, circular 24-18, for 550 gals. ready-mixed olive-drab paint.

Paint and Shellac

U. S. M. C., Washington

The quartermaster, U. S. Marine corps, Navy Building, Washington, will open bids at 11 a. m. September 19 for 250 lbs. cardinal red semi-paste and 1,200 gals. white shellac.

Paints, Oils and Chemicals

Chicago Q. M. Circular 24-16

Bids are wanted September 20 at the Chicago quartermaster intermediate depot, 1819 West Pershing Road, Chicago, circular 24-16 RS, for 134 gals. acid-proof paint, 66 gals gray paint, 128 gals. graphite paint, 264 gals heat resisting paint, 1,600 gals. olive drab paint, 2,185 gals. do, 267 lbs. stencil paint, 60 cans white enamel paint, 78 lbs. zinc oxide, 108 gals. paint and varnish remover, 1,600 pints turpentine, 1,020 gals. do, 175 gals. asphalt varnish, 238 gals. spar varnish, 63 gals. lubricating compound, 2,800 gals. boiled linseed oil, 428 gals. sperm oil, 1,500 cans mimeograph ink, 6,000 scrubbing brushes, 16,800 cans lye, 1,800 cans stove polish.

Varnish

Navy Schedule 1311

Bids are wanted October 9 at the Bureau of Supplies and Accounts, Navy Department, Washington, for furnishing 200 gals. interior varnish and 250 gals. spar varnish for Puget Sound.

Bituminous Enamel and Primer

Navy Schedule 1299

Bids are wanted September 25 at the Bureau of Supplies and Accounts, Navy Department, Washington, for furnishing 23,500 lbs. bituminous enamel and 900 gals. bituminous primer for Boston.

Tank Wagon and Service Station Prices

New England Territory

	Cents per gallon—Gasoline. Tank wagon.	Service station.	Kerosene.
Augusta, Me.	19.5	22	14
Boston, Mass.	19.5	22	14
Bridgeport, Conn.	20	23	14
Burlington, Vt.	19.5	23	15
Hartford, Conn.	19.5	23	14
Manchester, N. H.	19.5	22	14
New Haven, Conn.	19.5	22	14
New London, Conn.	19.5	23	14
Portland, Me.	19.5	22	14
Providence, R. I.	20.5	23	14
Springfield, Mass.	20.5	23	14
Worcester, Mass.	20.5	23	14

Trunk Line Territory

Albany, N. Y.	19	22	14
Allentown, Pa.	19	24	14
Annapolis, Md.	20.5	22.5	13
Atlantic City, N. J.	19.5	21.5	13
Baltimore, Md.	19.5	21.5	12
Binghamton, N. Y.	19.5	22	14
Buffalo, N. Y.	18	20	13
Cumberland, Md.	19.5	23	14
Dover, Del.	20	23	14
Erie, Pa.	19	24	14
Harrisburg, Pa.	19	23	14
Newark, N. J.	19.5	22	14
New York, N. Y.	19.5	22	14
Philadelphia, Pa.	19	24	14
Pittsburgh, Pa.	19	24	14
Rochester, N. Y.	18.5	22	13
Scranton, Pa.	16	21	14
Syracuse, N. Y.	16	19	14
Trenton, N. J.	19.5	22	13
Utica, N. Y.	19.5	22	14
Warren, Pa.	19	24	14
Washington, D. C.	20	22	12.5
Wilkes-Barre, Pa.	19	24	14
Wilmington, Del.	20	23	14

Southeastern Territory

Atlanta, Ga.	18	20	15
Augusta, Ga.	18	20	14
Birmingham, Ala.	18	20	14.5
Charleston, S. C.	19.5	20.5	11.5
Charlotte, N. C.	22	24	13.5
Columbia, S. C.	23	24	13.5
Danville, Va.	20	22	12.5
Hickory, N. C.	22.5	24.5	14.5
Jacksonville, Ala.	18	20	13
Jacksonville, Fla.	18	20	13
Macon, Ga.	18	20	14.5
Miami, Fla.	20	22	14.5
Mobile, Ala.	17	19	13.5
Montgomery, Ala.	18	20	15
Mt. Airy, N. C.	22	24	14.5
Norfolk, Va.	24	26	12
Pensacola, Fla.	18	20	13.5
Petersburg, Va.	24.5	26.5	13.5
Richmond, Va.	23.5	25.5	13.5
Roanoke, Va.	24.5	26.5	14
Salisbury, N. C.	22	24	13.5
Savannah, Ga.	16	18	13
Tampa, Fla.	18	20	13

Southern Territory

Bowling Green, Ky.	22	24	14
Charleston, W. Va.	22	24	14
Chattanooga, Tenn.	18.5	20.5	13.5
Clarkdale, Miss.	16	18	13
Covington, Ky.	18	20	13
Jackson, Miss.	16	18	11
Keyser, W. Va.	22	24	14
Knoxville, Tenn.	19.5	21.5	14
Lexington, Ky.	18	20	14
Louisville, Ky.	17	19	13
Memphis, Tenn.	18	20	13
Nashville, Tenn.	18.5	22	14.5
Natchez, Miss.	15.5	17.5	12.5
Parkersburg, W. Va.	21	23	11
Vicksburg, Miss.	15.5	17.5	12.5

Central Freight Assn. Territory

Ann Arbor, Mich.	14.7	16.7	12.6
Battle Creek, Mich.	14.5	16.5	12.4
Bay City, Mich.	21.5	23.5	12.5
Chicago, Ill.	14.9	16.9	11.5
Cincinnati, O.	19	21	13
Cleveland, O.	18½	20½	12
Columbus, O.	18½	20½	12
Dayton, O.	18½	20½	12
Decatur, Ill.	14.2	16.2	12
Detroit, Mich.	14.8	16.8	12.7
East St. Louis, Ill.	12.8	14.8	11.1
Evansville, Ind.	13	15	12
Fort Wayne, Ind.	13.4	15.4	12.4
Grand Rapids, Mich.	14.7	16.7	12.6
Indianapolis, Ind.	13.2	15.2	12.2
Joliet, Ill.	13.4	15.4	12.2
La Crosse, Wis.	15.2	17.2	12
Madison, Wis.	14.3	16.3	12
Milwaukee, Wis.	14	16	11.7
Peoria, Ill.	14.2	16.2	12
Quincy, Ill.	14	16	11.8
Saginaw, Mich.	14.9	16.9	12.8
South Bend, Ind.	13.5	15.5	12.8
Toledo, O.	18½	20½	13

Inter-Mountain Territory

Albuquerque, N. M.	19	21	15.5
Basin, Wyo.	16	..	14
Billings, Mont.	19.5	21.5	15.5
Boise, Idaho	20	22	9
Butte, Mont.	21	23	16
Casper, Wyo.	14	16	12
Cheyenne, Wyo.	15.5	17.5	13.5
Cody, Wyo.	17	..	15
Denver, Colo.	17	19	13.5
Glenwood Springs, Colo.	21	..	17.5
Great Falls, Mont.	21	23	17
Helena, Mont.	21	23	17
Lander, Wyo.	16	..	14
Miles City, Mont.	20.5	22.5	16.5
Ogden, Utah.	22	24	16.5
Phoenix, Ariz.	18.5	21.5	21.5
Pueblo, Colo.	17	19	13.5
Reno, Nev.	17.5	20.5	19
Salt Lake City, Utah.	22	24	16.5

Southwestern Territory

Alexandria, La.	14.5	17.5	12
Baton Rouge, La.	15	17	10.5
Bartlesville, Okla.	18.5	20.5	10.4
Bristol, Tenn.	18	20	15.5
Beaumont, Tex.	16	19	11
Camden, Ark.	17.5	19.5	13
Dallas, Tex.	13	16	10
El Dorado, Kan.	19.4	21.4	11.3
El Paso, Tex.	16	19	13
Fort Smith, Ark.	18	21	11
Fort Worth, Tex.	13	16	10
Galveston, Tex.	17	20	12
Houston, Tex.	14	18	12
Jefferson City, Mo.	14.2	16.2	12.1
Joplin, Mo.	13.6	15.6	11.5
Kansas City, Mo.	12.9	15.9	10.8
Kansas City, Kan.	11.9	14.9	10.8
Lake Charles, La.	14.5	17.5	12
Little Rock, Ark.	19.5	21.5	12
Muskogee, Okla.	16	19	9
New Orleans, La.	15.5	17.5	11
Oklahoma City, Okla.	13	15	9
San Antonio, Tex.	11	14	11
St. Joseph, Mo.	14.3	16.3	11.7
St. Louis, Mo.	12.6	14.6	11.5
Shreveport, La.	14.5	16.5	12
Terrell, Tex.	16	19	11
Texarkana, Ark.	17	20	11
Topeka, Kan.	13.9	15.9	16.4
Tulsa, Okla.	15	18	9
Wichita, Kans.	13.8	15.8	11.3

Pacific Coast Territory

Fresno, Cal.	11.5	14.5	17.5
Los Angeles, Cal.	10	13	15.5
Portland, Ore.	15	18	16.5
San Francisco, Cal.	11	14	15.6
Seattle, Wash.	13	16	16.5
Spokane, Wash.	16.5	19.5	20.5
Tacoma, Wash.	13	16	16.5

Western Trunk Line Territory

Aberdeen, S. D.	17	19	13.6
Bismarck, N. D.	19	21	13.6
Davenport, Ia.	17.5	19.5	12.2
Des Moines, Ia.	17.2	19.2	12.4
Duluth, Minn.	15.2	17.2	12.4
Fargo, N. D.	17.7	19.7	15
Grand Forks, N. D.	18.6	20.6	14.9
Huron, S.D.	18.5	20.5	12.6
Keokuk, Ia.	17.2	19.2	12.4
Minneapolis, Minn.	14.9	16.9	13.1
Minot, N. D.	19.3	21.3	16.6
Omaha, Neb.	13.9	15.9	11.75
Pipestone, Minn.	..	..	..
St. Paul, Minn.	14.1	16.1	12
Sioux City, Ia.	14.1	16.1	12
Sioux Falls, S. D.	16.5	18.5	13.4

Tank wagon prices of gasoline include State taxes of 3c. per gallon in Florida, North Carolina, Oregon, South Carolina and Virginia; 2½c. in Utah; 2c. in Alabama, Arkansas, California, Colorado, Idaho, Indiana, Montana, Nevada, Pennsylvania, South Dakota, Tennessee and Washington; 1c. in Arizona, Connecticut, Delaware, Georgia, Kentucky, Louisiana, Maine, Maryland, Mississippi, New Hampshire, New Mexico, North Dakota, Oklahoma, Texas, Vermont, West Virginia and Wyoming.

Georgia prices include ½c. a gallon inspection fees on both gasoline and kerosene; Alabama, ½c. on gasoline; Florida, 0.13c. on both gasoline and kerosene; and Kentucky, 0.2c. on both gasoline and kerosene. The Kansas City, Mo., price on gasoline includes a 1c. local tax.

Where You Can Buy — Continued from page 13

INDUSTRIAL CHEMICALS

(Prices: Pg. 6, col. 1)

Alexander & Co., Inc., G. S.
American Cyanamid Co.
Arnold Hoffman & Co., Inc.
Baker & Bro., H. J.
Balbach Smelting & Refining Co
Barrett Co., The
Battelle & Renwick
Blagden & Co., Ltd., Victor
Carbide Carbon & Chemical Co.
Chicago Copper & Chemical Co.
Church & Dwight Co.
Cleveland-Cliffs Iron Co., The
Coignet Chem. Products Co., Inc.
Commercial Solvents Corp.
Cooper & Cooper, Inc.
Darco Sales Corporation
Diamond Alkali Co.
Dickinson & Co., J. Q.
Dow Chemical Co., The
Drakenfeld & Co., B. F.
Du Pont de Nemours & Co., E. I.
Erkenbrach & Co., George A.
Federal Phosphorus Co.
Fergusson, Jr., Alex. C.
Fergusson Brothers
Franks Chemical Products Co.
General Chemical Co.
Grasselli Chemical Co., The
Gray & Co., William S.
Greeff & Co., Inc., R. W.
Hardy & Ruperti, Inc., Chas
Harshaw, Fuller & Goodwin Co.
Hill's Son & So., Edward
Hollingsworth & Peterson
Hymes Brothers Co.
Industrial Chemical Co.
Innis, Speiden & Co., Inc.
Irvington Smelting & Ref. Works
Jackson & Co., Ellis
Klipstein & Co., A.
Kuttroff, Pickhardt & Co., Inc.
Mechling Bros. Chemical Co
Merck & Co.
Merrimac Chemical Co.
Meteor Products Co., Inc.
Miner Edgar Co., The
Monmouth Chemical Co.
Monsanto Chemical Works
Mutual Chemical Co. of Amer.
Myers, Dr. W. S.
Natural Products Refining Co.
Naugatuck Chemical Co., The
Niagara Alkali Co.
Norwegian Nitrogen Prod. Co.
Old Hickory Powder Plant
Pennsylvania Salt Mfg. Co.
Pfaltz & Bauer, Inc.
Seaboard Chemical Co.
Semet Solvay Co.
Sergeant Co., E. M.
Sino Java Handelsvereeniging
Societe Commerciale des Potasses d'Alsace.
Solvay Process Co., The
Southern Acid & Sulphur Co.
Speiden Whitfield Co., Inc.
Suter & Co., Inc., Eugene
Turner & Co., Joseph
Victor Chemical Works
Virginia Smelting Co.
Waugh & Co., Walter
White Co., T. & S. C.
Wiarda & Co., Inc., John C.
Wilckes, Martin Wilckes Co.
Winkler & Bro., Co., The Isaac
Wishnick-Tumpeer Chemical Co.
Wolf & Co., Jacques

Acids

(Prices: Pg. 6, col. 3)

Alexander & Co., Inc., G. S.
Baker & Bro., H. J.
Benkert & Co., Inc., W.
Cleveland Cliffs Iron Co., The
Dow Chemical Co., The
Du Pont de Nemours & Co., E. I.
Federal Phosphorus Co.
General Chemical Co.
Grasselli Chemical Co., The
Greeff & Co., Inc., R. W.
Harshaw, Fuller & Goodwin Co.
Heyden Chem. Co. of Amer., Inc.
Innis, Speiden & Co., Inc.
Kalbfleisch Corporation, The

Acid (continued)

Klipstein & Co., A.
Monsanto Chemical Works
Naugatuck Chemical Co., The
Pensylvania Salt Mfg. Co.
Pfizer & Co., Inc., Charles
Seaboard Chemical Co.
Semet Solvay Co.
Suter & Co., Inc., Eugene
Tennessee Copper Co.
Victor Chemical Works
Waugh & Co., Walter
Wilckes, Martin, Wilckes Co.

COAL TAR PRODUCTS

Basic Products

(Prices: Pg. 6, col. 3)

Baird & McGuire, Inc.
Blagden & Co., Ltd., Victor
Barrett Co., The
Chatfield Mfg. Co., The
Chemical Products Corp.
Heyden Chem. Co. of America
Jayne & Sidebottom, Inc.
Jordan Coal Tar Prod. Co., Inc.
Major & Co., Ltd.
Monsanto Chemical Works
Pennsylvania Refining Co., The
Union Creosote & Oil Co., Inc.
Waugh & Co., Walter

Coal Tar Acids

(Prices: Pg. 6, col. 3)

Baker & Bro., H. J.
Calco Chemical Co., The
Commonwealth Chemical Corp
Du Pont de Nemours & Co., E. I.
Greeff & Co., Inc., R. W.
Heyden Chemical Co. of America
Monsanto Chemical Works
National Aniline & Chem. Co.
Semet-Solvay Co.

Intermediates

(Prices: Pg. 6, col. 3)

Calco Chemical Co., The
Dehls & Stein
Du Pont de Nemours & Co., E. I.
Heller & Merz Co., The
Innis, Speider & Co., Inc.
Klipstein & Co., A.
Metz & Co., Inc., H. A.
Monsanto Chemical Works
National Aniline & Chem. Co.
Naugatuck Chemical Co., The
Semet-Solvay Co.
Southern Dyestuffs Co.
Waugh & Co., Walter

Coal Tar Disinfectants

American Kreuger & Toll Corp.
Baird & McGuire, Inc.
Barrett Co., The
Chemical Products Corp.
Hunt Manufacturing Co., The
Monsanto Chemical Works

Acid Colors

(Prices: Pg. 8, col. 1)

Calco Chemical Co., The
Du Pont de Nemours & Co., E. I.
Heller & Merz Co., The
Klipstein & Co., A.
Metz & Co., Inc., H. A.
National Aniline & Chem. Co.
New York Color & Chemical Co.

Basic Colors

(Prices: Pg. 8, col. 1)

Calco Chemical Co., The
Du Pont de Nemours & Co., E. I.
Heller & Merz Co.
Klipstein & Co., A.
Metz & Co., Inc., H. A.
National Aniline & Chem. Co.
New York Color & Chemical Co.

Chrome Colors

(Prices: Pg. 8, col. 1)

Calco Chemical Co., The
Du Pont de Nemours & Co., E. I.
Klipstein & Co., A.
Metz & Co., Inc., H. A.

Sulphur Colors

(Prices: Pg. 8, col. 3)

Du Pont de Nemours & Co., E. I.
Klipstein & Co., A.
Metz & Co., Inc., H. A.
National Aniline & Chem. Co.
Waugh & Co., Walter

FERTILIZER MATERIALS

Ammoniates

(Prices: Pg. 8, col. 3)

Barrett Co., The
Battelle & Renwick
Kuttroff Pickhardt & Co., Inc
Naamlooze Vennootschap Veemesta
New England Fuel & Transportation Co.

Nitrogenous

(Prices: Pg. 8, col. 3)

American Cyanamid Co.
Naamlooze Vennootschap Veemesta
Norwegian Nitrogen Prod. Co.

Phosphates

(Prices: Pg. 8, col. 4)

Baker & Bro., H. J.
Naamlooze Vennootschap Veemesta

DYESTUFFS AND TANSTUFFS

Natural Dyestuffs

(Prices: Pg. 8, col. 3)

Barrett & Co., M. L.
Fezandie & Sperrle
Grasselli Chemical Co., The
Innis, Speiden & Co., Inc.
Klipstein & Co., A.
Metz & Co., Inc., H. A.
Ransom Co., L. E.
Schieffelin & Co.

Textile Chemicals

(Prices: Pg. 8, col. 3)

Baker & Bro., H. J.
Blagden & Co., Ltd., Victor
Innis Speiden & Co., Inc.
Meteor Products Co., Inc.
Metz & Co., Inc., H. A.
Mutual Chemical Co. of America, The
Natural Products Refining Co.
Shaw & Co., John
Superfos Co., The
Suter & Co., Inc., Eugene
Tennant Sons & Co., C.
Waugh & Co., Walter

Extracts

(Prices: Pg. 8, col. 4)

American Dyewood Co.
Lewis, John D.

CONTAINERS AND SUPPLIES

Barrels, Steel

Draper Mfg. Co., The
Erie Steel Barrel Co.
Gluck Steel Barrel Co.
Meurer Steel Barrel Co., Inc.
Petroleum Iron Works Co., The
Pittsburg Can Co.
Republic Steel Package Co., The
Wheeling Steel Products Co.
Wilson & Bennett Mfg. Co.

Brushes

Whiting J. L.-J. J. Adams Co.

Cans, Steel

Trageser Steam Copper Works, John

Cans, Tin

American Can Co.
Continental Can Co., Inc.
Heekin Can Co., The
Jayne & Sidebottom, Inc.
Pittsburg Can Co.

Chemical Stoneware

Knight, Maurice A.

Corrugated Containers

Gair Co., Robert

Drums, Steel

Draper Mfg. Co., The
Erie Steel Barrel Co.
Gluck Steel Barrel Co.
Meurer Steel Barrel Co., Inc.
Petroleum Iron Works Co., The
Pittsburg Can Co.
Republic Steel Package Co., The
Wheeling Steel Products Co.
Wilson & Bennett Mfg. Co.

Filter Paper

Giese & Son, August

Gauges

Schaeffer & Budenberg Mfg. Co.

Kegs, Wooden

Chess & Wymond Co.
Cleveland Cooperage Co., The

Labels

Gair Co., Robert
Kittredge & Co., R. J.

Pails, Steel

Wilson & Bennett Mfg. Co.

MACHINERY

Chemical and Dye

Bartlett & Snow Co., The C. O.
Buffalo Foundry & Machine Co.
Campbell, P. F.
Devine Co., J. P.
Oat & Sons, Joseph
Proctor & Schwartz, Inc.
Wurster & Sanger

Drug

Buffalo Foundry & Machine Co.
Campbell, P. F.
Devine, J. P.

Laboratory Apparatus

Buffalo Foundry & Machine Co.
Devine Co., J. P.
Eimer & Amend
Oat & Sons, Joseph

Oil

Anderson Co., The V. D.
Bartlett & Snow Co., The C. O.
Buffalo Foundry & Machine Co.
Garrigue & Co., William
National Transit Pump & Machine Co.
Shriver & Co., T.
Sperry & Co., D. R.
Wurster & Sanger

Paint

Bartlett & Snow Co., The C. O.
Campbell, P. F.
Colton Co., Arthur
Day Co., The J. H.
Hottmann Machine Co., The
Kent Machine Works
Raymond Bros. Impact Pulverizer Co.
Waterville Foundry & Mfg. Co.

Miscellaneous

Bradley, A. J.

Oil Tanks

Garrigue & Co., William
Littleford Bros.
Petroleum Iron Works Co., The

Paint-Varnish Tanks

Littleford Bros.
Petroleum Iron Works Co., The

Tank Cars

American Car & Foundry Co.
General American Tank Car
Pennsylvania Tank Car Co., The
Shippers Car Line, Inc.

SERVICE

Parcel Post Insurance

Insurance Co. of North America

Chemists and Engineers

Alexander, Jerome
Ambruster, Howard W.
Bacon, Dr. R. F.
Benedict Laboratories, The
Bull & Roberts
Bureau of Chemistry
Cowing Laboratories
Ekroth Laboratories
Eldred & Atkinson, Inc.
Ellis-Foster Co.
Fairlie, Andrew M.
Garrigue & Co., Inc., William
Ginsberg, Ismar, B.Sc.
Gray Indus. Laboratories, The
Henderson, R. R.
Hochstadter Laboratories
Hunt Co., Robert W.
Industrial Chemical Laboratories
Jacoby, Henry E., M. E.
Kem Service Laboratories, Inc.
Kiefer, K. H.
Kobold Corporation, The
Laning Co., Inc., E. M.
Maas, Arthur R.
Mantius, Otto
McKenna, Dr. Chas. F.
McMichael, Paul
Meyer, Martin, Ph.D.
Millring, E. Ross, B.Sc.
New York Testing Laboratories
Organic Laboratories
Pease Laboratories, Inc.
Sadtler, Samuel P., & Son, Inc.
Schwarz Laboratories
Seil, Putt & Rusby, Inc.
Sieck & Drucker, Inc.
Stillwell & Gladding
Stillwell Laboratories, The
Sutton, Frank
Vorce, L. D.
Weiss & Downs
Wells, Raymond
Wiley & Co., Inc.
Worden Chemical Laboratory
Wurster & Sanger

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Imports Entered for Consumption at New York

Week Ended September 14, 1923

ACID, CRESYLIC—86 dms, 25,800 lbs, Monsanto Chem Works, Baltic, Liverpool
FORMIC—123 cbys, 11,567 lbs, R W Greef & Co, Elmsport, Rotterdam
STEARIC—20 cs, M V Parson & Plymouth Organic Lab, Niew Amsterdam, Rotterdam
AGAR AGAR—1 bl, 200 lbs, McKesson & Robbins, Minnewaska, London
ALBUMEN, EGG—29 cs, 5,800 lbs, Sino Java Handelsveeringing, Inc, Diomed, Shanghai
145 cs, 29,000 lbs, Balfour, Williamson & Co, Diomed, Shanghai
56 cs, 11,200 lbs, T H Duche & Sons, Diomed, Shanghai
56 cs, 11,200 lbs, consignee to follow, Diomed, Shanghai
16 cs, 3,200 lbs, Gravely & Co, Inc, Diomed, Tientsin
28 cs, 5,600 lbs, A Klipstein & Co, Manitowoc, Vancouver
31 cs, 6,200 lbs, D L Moss & Co, Manitowac, Vancouver
572 cs, 114,440 lbs, Jardine, Matheson & Co, Monitowoc, Vancouver
56 cs, 11,200 lbs, Wah Chang Trading Corp, Manitowoc, Vancouver
30 cs, 6,000 lbs, Stein Hall & Co, Manitowoc, Vancouver
45 cs, 9,000 lbs, Doher, Grimen & Co, Genoa Maru, Hankow
11 cs, 2,200 lbs, China Hide & Prod Co, Genoa Maru, Hankow
34 cs, 6,800 lbs, Frazar & Co, Genoa Maru, Tientsin
25 cs, 5,000 lbs, Phil Segaller, Genoa Maru, Tientsin
15 cs, 3,000 lbs, Stanley Jordan & Co, Genoa Maru, Tientsin
10 cs, 2,000 lbs, Irving Bank Columbia Trust Co, Hamburg Maru, Shanghai
22 cs, 4,400 lbs, Frazar & Co, Hamburg Maru, Tientsin
ALCOHOL, BUTYL—210 cks, Commercial Solvent Corp, Collamer, Bordeaux
DENATURED—150 bbls, 7,500 gls, C Esteva, Ponce, Arecibo
ALIZARIN—23 cks, H A Metz & Co, Nieuw Amsterdam, Rotterdam
5 cks, A Klipstein & Co, Baltic, Liverpool
AMMONIA, NITRATE—2,081 cks, 1,238,935 lbs, Kuttroff Pickhardt & Co, Tyerhenia, Harmburg
AMMONIAC SAL—78 cks, 46,800 lbs, Philip Bauer Co, Inc, Mongolia, Hamburg
ANILINE COLORS—19 cks, Bernard, Judae & Co, Tyrrhenia, Hamburg
1 cs, Bernard, Judae & Co, Tyrrhenia, Hamburg
12 cks, H A Metz & Co, Nieuw Amsterdam, Rotterdam
7 cks, Ackerman Collor Co, Suffern, Havre
15 cks, Geigy Co, Inc, Zeeland, Antwerp
17 cks, Geigy Co, Inc, Zeeland, Antwerp
10 cks, Ackerman Color Co, Conte Verdi, Genoa
23 cks, Irving Bank-Columbia Trust Co, Conte Verdi, Genoa
9 cks, Franklin Import & Export Co, Hansa, Hamburg
8 cks, Kuttroff, Pickhardt & Co, Hansa, Hamburg
19 cks, The Ciba Co, Inc, Paris, Havre
33 cks, Sandoz Chem Works, Paris, Havre
3 kgs, G & H Transport Co, Inc, President Monroe, London
1 cs, H A Metz & Co, Reliance, Hamburg
ANTIMONY, CRUDE—750 cs, 150,000 lbs, C F Smillie & Co, Diomed, Hankow
230 cs, 46,000 lbs, Wah Chang Trading Corp, Genoa Maru, Shanghai
350 cs, 70,000 lbs, Sino Java Handelsveriging, Inc, Genoa Maru, Hankow
OXIDE—500 cs, 100,000 lbs, F A Cundill & Co, Inc, Diomed, Hankow
500 cs, 100,000 lbs, C F Smillie & Co, Diomed, Hankow
500 cs, 100,000 lbs, Wah Chang Trading Corp, Genoa Maru, Shanghai
REGULUS—480 cs, 96,000 lbs, Asia Banking Corp, Diamed, Hankow
500 cs, 100,000 lbs, Jardine, Matheson & Co, Diamed, Shanghai
SULPHIDE—150 cks, Heemsoth, Basse & Co, Suffern, Havre
ARSENIC—100 cks, 60,000 lbs, The Ore & Chem Corp, Mongolia, Hamburg
100 cs, 13,000 lbs, G F Taylor & Co, Genoa Maru, Yokohama
116 bbls, 46,400 lbs, American Smelting & Ref Co, Yucatan, Tampico
180 bbls, 72,000 lbs, American Metal Co, Yucatan, Tampico
346 cs, 44,980 lbs, G F Taylor & Co, Hamburg Maru, Kobe
ASBESTOS—2,576 bgs, 515,200 lbs, W D Crumpton, Sandgate Castle, Beira
BALSAM—23 cs, 2,300 lbs, Dodge & Olcott Co, Ecuador, La Libertad
10 cs, 1,000 lbs, Hamberger, Polheims & Co, Ecuador, La Libertad
BARIUM, BINOXIDE—20 dms, 5,800 lbs, A Penchot, Galileo, Hull
CARBONATE—650 bgs, 130,000 lbs, Innis, Speiden & Co, Cameronia, Glasgow
336 bgs, 67,200 lbs, Whittaker, Clark & Daniels, Cameronia, Glasgow
43 cks, 21,500 lbs, Charles Hardy & Rupert, Hansa, Hamburg
NITRATE—60 bbls, Unexcelled Mfg Co, Mongolia, Hamburg
SULPHATE—1,000 bgs, 110,000 lbs, Smith Chem Co, Cabo Ortegal, Seville
BARK, CINCHONA—48 bgs, 9,600 lbs, Peek & Velsor, Nieuw Amsterdam, Rotterdam
300 bls, 60,000 lbs, McKesson & Robbins, Nieuw Amsterdam, Rotterdam
10 bls, 2,000 lbs, H R Lathrop & Co, Minnewaska, London
MEDICINAL—11 bgs, 998 lbs, McLaughlin, Gormley & King, Hansa, Hamburg
BAY RUM—20 bbls, 960 gls, E F Gittens Co, Guiana, St Thomas
25 cks, 1,200 gls, Lehn & Fink, Guiana, St Thomas
BEANS, CASTOR—23,765 bgs, 83,177 bu, Ralli Bros, Jeseric, Cocanada
30 bgs, 105 bu, Huttlinger & Struller, W M Tupper, Fort de Paix
COCOA—5 bgs, 750 lbs, Fruit Dispatch Co, Galileo, Hull
VANILLA—27 cs, 3,375 lbs, O G Hempstead & Sons, Waukegan, Havre
1 cs, 125 lbs, Bennet, Day & Co, Inc, Vechtdijk, Surabaya
25 cs, 3,125 lbs, Thurston & Braidich, Patria, Marseilles
BONE BLACK—380 bgs, 76,000 lbs, Pomeroy & Fischer, Hudson, Bordeaux
BRISTLES—43 cs, Chesnut, Cooper & Co, Saxonia, Liverpool
10 cs, Huth & Co, Waukegan, Havre
14 cks, American Express Co, Tyrrhenia, Hamburg
7 cs, American Express Co, Tyrrhenia, Hamburg
5 cs, Dancy Maguire & Co, Minnewaska, London
9 cs, Huth & Co, Minnewaska, London
5 cs, Bank of America, Minnewaska, London
56 cs, Chesnut, Cooper & Co, Minnewaska, London
15 pkgs, Dancy Maguire & Co, Minnewaska, London
9 cs, Jardine, Matheson & Co, Diomed, Hankow
10 cs, Equitable Trust Co, Diomed, Shanghai
66 cs, Chesnut, Cooper & Co, Diomed, Shanghai
50 cs, Bank of New York, Diomed, Tientsin
98 cs, International Bank Corp, Diomed, Tientsin
3 cs, M Broverman & Son, President Monroe, London
21 cs, American Hair & Bristle Co, President Monroe, London
10 cs, Chesnut, Cooper & Co, President Monroe, London
20 cs, Standard Bank of South Africa, President Monroe, London
4 cs, B C Ritchie & Co, Genoa Maru, Canton
121 cs, China Hide & Prod Co, Genoa Maru, Newchang
100 cs, F H Cone, Genoa Maru, Hankow
50 cs, China Hide & Prod Co, Genoa Maru, Hankow
9 cs, M H Williams, Genoa Maru, Hankow
50 cs, Huesmann & Co, Genoa Maru, Hankow
275 cs, Bertoling & Co, Genoa Maru, Tientsin
55 cs, Goldman, Sachs & Co, Genoa Maru, Tientsin
66 cs, Frazer & Co, Genoa Maru, Tientsin
50 cs, China Hide & Prod Co, Genoa Maru, Tientsin
65 cs, Mechanic & Metal National Bank, Genoa Maru, Tientsin
105 cs, F H Cone, Genoa Maru, Tientsin
125 cs, China Hide & Prod Co, Genoa Maru, Taku
10 cs, Pinckhey, Van Vranchen, Inc, Genoa Maru, Dairen
8 cs, F H Cone, Genoa Maru, Kobe
13 cs, F H Cone, Hamburg Maru, Hankow
110 cs, F H Cone, Hamburg Maru, Tientsin
10 cs, F W Von Statte, Hamburg Maru, Tientsin
2 cs, P Schenkler, Verbania, London
10 cs, M Bondi & Shapiro, Mauretania, Southampton
BRONZE POWDER—5 cs, 650 lbs, Leo Uhlfelder & Co, Minchem, Bremen
8 cs, 1,040 lbs, Hensel, Bruckmann & Lorbacher, Mimchem, Bremen
CALOMEL—10 cs, 500 lbs, H J Baker & Bro, Verbania, London
CAMPHOR, CRUDE—50 cs, 5,000 lbs, Mitsiu & Co, Genoa Maru, Shanghai
300 cs, 30,000 lbs, Suzuki & Co, Genoa Maru, Shanghai
200 cs, 20,000 lbs, Suzuki & Co, Hamburg Maru, Shanghai
CARDAMOM—8 cs, J L Hopkins & Co, Minnewaska, London
25 cs, F R Henderson & Co, Jeseric, Colombo
CASEIN—491 bgs, 88,000 lbs, E B Muns, Collamer, St Nazaire
CHALK, BLOCK—1,430,000 kilos, 3,146,000 lbs, Taintor Trading Co, Waukegan, Dunkirk
500 tons, Taintor Trading, Verbania, London
500 tons, Taintor Trading, Hudson, Dunkirk
PRECIPITATED—48 bgs, 10,560 lbs, S B Penick & Co, Mumewaska, London
240 bgs, 52,800 lbs, Anderson Hillier Co, Inc, Prest Monroe, London
CHEMICALS—260 bgs, Jungman & Co, Finland, Hamburg
110 cks, Jungman & Co, Finland, Hamburg
48 bbls, A Klipstein & Co, Finland, Hamburg
45 cks, C B Richard & Co, Ohio, Hamburg
3 cs, Hoffmann La Roche Chem Works, Zeeland, Antwerp
2 cs, Morganstern & Co, Hansa, Hamburg
2 cs, Merck & Co, Hansa, Hamburg
50 cs, State Forwarding & Shipping Co, Paris, Havre
2 cs, T P Roosa, Mongolia, Hamburg
7 bbls, Hummel & Robinson, Mongola, Hamburg
53 bbls, Chaplain & Bibbo, Inc, Mongolia, Hamburg
50 cs, Jungman & Co, Mongolia, Hamburg
10 kegs, Jungman & Co, Mongolia, Hamburg
125 cks, Jungman & Co, Mongolia, Hamburg
CHILLIES—450 bgs, 38,400 lbs, A Joensson & Co, Inc, Jeseric, Cocanada
200 bgs, 16,000 lbs, Shima Trading Co, Hamburg Maru, Osaka
CINCHONINE—10 cs, R W Greef & Co, Inc, Nieuw Amsterdam, Rotterdam
5 cs, Mallinckrodt Chem Works, Nieuw Amsterdam, Rotterdam
CLAY—30 cks, Roessler & Hasslacher Chem Co, Nieuw Amsterdam, Rotterdam
COCONUT—263 bgs, 26,300 lbs, Franklin Baker Co, Ponce, Mayaguez
51 bgs, 5,100 lbs, Swart Fruit Dist Co, Ponce, Aguadilla
16 bgs, 1,600 lbs, A Spits, Ponce, Aguadilla
200 bgs 20,000 lbs, L Schepps & Co, Ponce, Aguadilla
452 bgs, 45,200 lbs, Franklin Baker Co, Ponce, Aguadilla
92 bgs, 9,200 lbs, Far Eastern Corp, Ponce, San Juan
175 bgs, 17,500 lbs, Grevatt Bros, Ponce, San Juan
1832 bgs, 183,200 lbs, Franklin Baker Co, Ponce, San Juan
977 bgs, 97,700 lbs, Franklin Baker Co, San Lorenzo, San Juan
100 bgs, 10,000 lbs, Grevatt Bros, San Lorenzo, San Juan
863 bgs, 86,300 lbs, Banana Sales Corp, Cananora, Port Antonio
239 bgs, 23,900 lbs, Tropical Fruit Corp, Verona, Port Antonio
549 bgs, 54,900 lbs, F W Bussing, Vasari, Trinidad
288 bgs, 28,800 lbs, Dunham & Macy, Vasari, Trinidad
780 bgs, 78,000 lbs, Colonial Bank, Port Antonio, Kingston
1,500 bgs, 150,000 lbs, Fruit Despatch Co, Port Antonio, Port Antonio
128 bgs, 12,800 lbs, Franklin Baker Co, Port Antonio, St Ann's Bay
250 bgs, 25,000 lbs, Hills Bros & Co, Gen W C Gorgas, Cristobal
138 bgs, 13,800 lbs, R Wilcox, Gen W C Gorgas, Cristobal
500 bgs, 50,000 lbs, Franklin Baker Co, Gen W C Gorgas, Cristobal
2,180 bgs, 218,000 lbs, M A De Leon & Co, Gen W C Gorgas, Cristobal
500 bgs, 50,000 lbs, I Brandon & Bro, Gen W C Gorgas, Cristobal
DESIC—200 cs, 26,000 lbs, T M Duche & Sons, Jeseric, Colombo
152 cs, 19,760 lbs, Philippine Desic Coconut Co, Diomed, Cebu
1,390 cs, 180,700 lbs, Franklin Baker Co, Diomed, Manila
COLORS—10 bbls, A Hurst & Co, Tyrrhenia, Hamburg
2 cs, Favor, Ruhl & Co, Paris, Havre
3 cs, B F Drakenfeld & Co, Paris, Havre
DRY—12 cks, Stanley Doggett, Inc, Homeric, Southampton
10 cks, Stanley Doggett, Inc, Mauretania, Southampton
JAPAN BROWN—5 cks, Foch Bros, Minnewaska, London
COPRA—15 bgs, 1,950 lbs, Franklin Baker Co, San Lorenzo, San Juan
7 bgs, 910 lbs, Franklin Baker Co, Port Antonio, St Ann's Bay
CORK, WASTE—435 bgs, 43,500 lbs, Mediterranean & General Traders, Inc, La Bourdonncis
WOOD—110 bls, 11,000 lbs, Wicander & Co, Inc, Cabo Ortegal, Seville
CUBEBS—47 bgs, 5,640 lbs, Winter, Ross & Co, Diomed, Singapore
DECOLORIZING CARBON—663 bgs, 132,600 lbs, L A Salomon & Bro, Nieuw Amsterdam, Rotterdam
DIVI DIVI—831 bgs, 83,100 lbs, American Trading Co, Carna, Maracaibo
DRAGONS BLOOD—6 cs, D F Young, Minnewaska, London
25 cs, Anderson-Hillier Co, Inc, Minnewaska, London
DRUGS—1 c McKesson & Robbins, Minnewaska, London
EARTH, SIENNA—96 bgs, Guaranty Trust Co, Teresa, Trieste
UMBER—48 cks, L H Butcher & Co, Galileo, Hull
EGG YOLK—564 cs, 112,800 lbs, Jardine, Matheson & Co, Manitowoc, Vancouver
43 cs, 8,600 lbs, Stein, Hall & Co, Manitowoc, Vancouver
56 cs, 11,200 lbs, Bingham & Co, Manitowoc, Vancouver
34 cs, 6,800 lbs, Frazar & Co, Genoa Maru, Tientsin
56 cs, 11,200 lbs, F R Hamish, Hamburg Maru, Tientsin
56 cs, 11,200 lbs, Frazar & Co, Hamburg Maru, Tientsin
8 cs, 1,600 lbs, Sino Javo Handelsveriging, Inc, Hamburg Maru, Tientsin
EPSOM SALT—200 cks, 63,000 lbs, Fidelity International Trust Co, Ohio, Hamburg
100 bbls, 63,000 lbs, E Suter & Co, Mongolia, Hamburg
100 cks, 63,000 lbs, Fidelity International Trust Co, Mongolia, Hamburg
1,600 bgs, 352,000 lbs, The Superfos Co Mongolia, Hamburg
ERGOT—25 bgs, 3,250 lbs, A Joensson & Co, Inc, Zeeland, Antwerp
FERRO CHROME—28 cks, D Heydeman, Stockholm, Gothenburg
FLAXSEED—2,190 bgs, 4,818 bu, L Dreyfus & Co, Vasari, Buenos Aires
3,879 bgs, 8,533 bu, consignee to follow, Vasari, Buenos Aires
FLORAL WATER—2 cks, Duval & Co, Patria, Marseilles
FLOWERS, MEDICINAL—9 bls, S B Penick & Co, Hansa, Hamburg
GELATIN—21 cs, P C Zuhlke, Nieuw Amsterdam, Rotterdam
125 bbls, H A Sinclair, Nieuw Amsterdam, Rotterdam
2 kegs, H A Sinclair, Nieuw Amsterdam, Rotterdam
49 cs, E A Rogers, Patria, Marseilles
4 pkgs, P Puttmann, Reliance, Hamburg
GLASS, PLATE—19 cs, Schrenk & Co, Nieuw Amsterdam, Rotterdam
4 cs, Bendit, Drey & Co, Zeeland, Antwerp
54 cs, L Solomon & Son, Zeeland, Antwerp
56 cs, Schrenk & Co, Zeeland, Antwerp
21 cs, J Elias & Co, Zeeland, Antwerp
51 cs, Eureka Glass Works, Zeeland, Antwerp
29 cs, Semon, Bache & Co, Zeeland, Antwerp
104 cs, French-American Banking Corp, Zeeland, Antwerp
54 cs, Brown Bros & Co, Zeeland, Antwerp
49 cs, Ford Motor Co, Baltic, Liverpool
2 cs, Semon, Bache & Co, Boltic, Liverpool
52 cs, Gerhard & Hey,, President Harding, Bremerhaven
WINDOW—57 cs, Manufacturers' Trust Co, Ohio, Hamburg
200 cs, International Acceptance Bank, Ohio, Hamburg
20 cs, Leo Popper & Sons, Zeeland, Antwerp
467 cs, Semon, Bache & Co, Zeeland, Antwerp
40 cs, Manufacturers' Trust Co, Zeeland, Antwerp
139 cs, Morris Glass Co, Baltic, Liverpool
2 cs, Semon, Bache & Co, Hansa, Hamburg
44 cs, Irving Bank-Columbia Trust Co, Hansa, Hamburg
22 cs, Irving Bank-Columbia Trust Co, Reliance, Hamburg
GLUE—20 bgs, Milligan & Higgins Glue Co, Minnewaska, London
80 bgs, Milligan & Higgins Glue Co, Galileo, Hull
200 bgs, S Isaacs & Co, Westerner, Antwerp
193 bgs, W E Miller, Zeeland, Antwerp
100 bgs, W E Miller, Paris, Havre
10 pkgs, Herman Loewensten, Paris, Havre
40 bgs, G H Hummel, President Monroe, London
5 bls, B F Drakenfeld & Co, Hudson, Havre
GLYCERIN—60 cks, 60,000 lbs, Thornett & Fehr, Hudson, Bordeaux
GRAPHITE—125 bbls, 75,000 lbs, H W Peabody & Co, Jeseric, Colombo
100 bbls, 60,000 lbs, H W Peabody & Co, Jeseric, Colombo
GREASE—50 cs, Orbis Product Trading Co, Saxonia, Liverpool
GUM, ARABIC—100 bgs, 22,000 lbs, Jacques, Wolf & Co, Jeseric, Port Sudan
150 bgs, 33,000 lbs, Curacanda Bros, Jeseric, Port Sudan
BENZOIN—25 cs, 2,750 lbs, J L Hopkins & Co, Diomed, Penang
BURNT—50 cks, Red Hand Composition Co, Minnewaska, London
COPAL—64 bgs, 9,600 lbs, G W S Patterson & Co, Saxonia, Liverpool
122 bgs, 18,300 lbs, G Winterbourne & Co, Minnewaska, London
320 bgs, 48,000 lbs, A Klipstein & Co, Westerner, Antwerp
200 bgs, 30,000 lbs, Innes & Co, Zeeland, Antwerp
200 bgs, 30,000 lbs, J D Lewis, Zeeland, Antwerp
200 bgs, 30,000 lbs, Innes & Co, Zeeland, Antwerp
396 bgs, 59,400 lbs, Innes & Co, Zeeland, Antwerp
1,511 baskets, 347,530 lbs, Innes & Co, Vechtdyk, Macassar
865 baskets, 198,950 lbs, S Winterbourne & Co, Vechtdyk, Macassar
140 baskets, 32,200 lbs, Paterson, Boardman & Knapp, Vechtdyk, Macassar
4 cs, 860 lbs, S Winterbourne & Co, Vechtdyk, Macassar
19 bgs, 2,850 lbs, France, Campbell & Darling, Vechtdyk, Macassar
1,130 baskets, 259,900 lbs, France, Campbell & Darling, Vechtdyk, Macassar
434 baskets, 99,820 lbs, Innes & Co, Vechtdyk, Macassar
140 bgs, 21,000 lbs, A Hurst & Co, Diomed, Manila
150 cs, 32,250 lbs, A Klipstein & Co, Hamburg, Maru, Singapore
70 bgs, 10,500 lbs, A Klipstein & Co, Hamburg Maru, Singapore
50 cs, 10,750 lbs, J D Lewis, Hamburg Maru, Singapore
140 bgs, 21,000 lbs, L C Gillespie & Son, Hamburg Maru, Singapore
61 bgs, 9,150 lbs, France, Campbell & Darling, Hamburg Maru, Singapore
DAMMAR—300 cs, 64,500 lbs, L C Gillespie & Sons, Vechtdyk, Batavia
200 cs, 43,000 lbs, Catz American Co, Vechtdyk, Batavia
272 cs, 58,695 lbs, L C Gillespie & Sons, Hamburg Maru, Singapore
GAMBOGE—3 cs, American Express Co, Minnewaska, London
KAURI—174 cs, 38,280 lbs, Paterson, Boardman & Knapp, Canadian Ranger, Auckland
312 bgs, 68,640 lbs, Paterson, Boardman & Knapp, Canadian Ranger, Auckland
126 cs, 27,720 lbs, J Meyer & Sons, Canadian Ranger, Auckland
101 bgs, 22,220 lbs, J Meyer & Sons, Canadian Ranger, Auckland
10 cs, 2,200 lbs, Davies Turner & Co, Canadian Ranger, Auckland
75 cs, 16,500 lbs, G W S Patterson & Co, Canadian Ranger, Auckland
318 bgs, 69,960 lbs, G W S Patterson & Co, Canadian Ranger, Auckland
601 bgs, 132,220 lbs, France, Campbell & Darling, Canadian Ranger, Auckland
729 cs, 160,380 lbs, J D Lewis, Canadian Ranger, Auckland
51 cs, 11,220 lbs, H W Peabody & Co, Canadian Ranger, Auckland
82 bgs, 18,040 lbs, S Winterbourne & Co, Canadian Ranger, Auckland
181 cs, 39,820 lbs, S Winterbourne & Co, Canadian Ranger, Auckland
591 cs, 130,020 lbs, A Klipstein & Co, Port Hunter, Auckland
172 bgs, 37,840 lbs, A Klipstein & Co, Port Hunter, Auckland
160 bgs, 35,200 lbs, J D Lewis, Port Hunter, Auckland
632 cs, 139,040 lbs, J D Lewis, Port Hunter, Auckland
60 cs, 13,200 lbs, Davies Turner & Co, Port Hunter, Auckland
120 cs, 26,400 lbs, L C Gillespie & Sons, Port Hunter, Auckland
244 bgs, 2,200 lbs, L C Gillespie & Sons, Port Hunter, Auckland
1 cs, 220 lbs, E F Drew & Co, Port Hunter, Auckland
72 cs, 15,840 lbs, H W Peabody & Co, Auckland
MASTIC—11 cs, S B Penick & Co, Asia, Marseilles
TRAGACANTH—20 cs, 2,200 lbs, Wm Mohrman, Aquitania Southampton
27 cs, 2,970 lbs, G Gulbankian & Co, Minnewaska, London
74 bgs, 9,620 lbs, Brown Bros & Co, Hansa, Hamburg
HAIR, HORSE—2 cs, Chesnut, Cooper & Co, Minnewaska, London
20 bls, Bank of America, Vasari, Buenos Aires
48 cs, F W Von Stade, Genoa Maru, Tientsin
53 cs, F H Cone, Hamburg Maru, Tientsin
HUMAN—25 cs, Far East Importing Co, Diomed, Canton
10 cs, B C Ritchie & Co, Patria, Palermo
19 cs, V Matta, Patria, Palermo
9 cs, C Culotta, Patria, Palermo
18 bls, Southern Press Cloth Mfg Co, Genoa Maru, Canton
88 cs, Bertoling & Co, Genoa Maru, Tientsin
HEMANTINE, CRYSTALS—19 bbls, Logwood Mfg Corp, W M Tupper, Cape Haitian
HERBS, MEDICINAL—7 bls, S B Penick & Co, Hansa, Hamburg
INDIGO—1 seroons, A L Erlanger, Ecuador, La Libertad
1 ck, H A Metz & Co, Nieuw Amsterdam, Rotterdam
IRISH MOSS—50 bls, Innis, Speiden & Co, Suffern, Havre
50 bls, C H Reisig, Suffern, Havre
10 bls, S B Penick & Co, Suffern, Havre
50 bls, Parke, Davis & Co, Suffern, Havre
20 bls, Nichelis-Rowland Co, Suffern, Havre
30 bls, J Schoenegan, Paris, Havre
IRON OXIDE—40 cks, 24,000 lbs, J Lee Smith & Co, Galileo, Hull
1 ck, 600 lbs, C B Chrystal, Westerner, Antwerp
185 cks, 111,000 lbs, Stanley Doggett, Inc, Galtymore, Leith
LAMPBLACK—400 cs, Fred Van Geisten, Nieuw Amsterdam, Rotterdam
LEAVES, BUCHU—5 bls, J L Hopkins & Co, Minnewaska, London
COCA—43 bls, Maywood Chem Works, Santa Elisa, Salaverry
HENBANE—12 bgs, A Joensson & Co, Inc, Zeeland, Antwerp
SENNA—201 bls, A Joensson & Co, Inc, Jeseric, Port Sudan
UVA URSA—425 bls, Allaire, Woodward & Co, Cabo Ortegal, Seville
LEECHES—5 cs, Midwood Chem Co, La Bourdonnais, Bordeaux
LICORICE, PASTE—50 cs, 13,750 lbs, Lehn & Fink, Teresa, Catania
LIME JUICE, CONCENTRATED—46 cks, 2,852 gls, Planters Prod Co, Guiana, Dominica
49 cks, 3,038 gls, Middleton & Co, Guiana, Dominica
LITHOPONE—120 cks, 72,116 lbs, E M & F Waldo, Westerner, Antwerp
200 cks, 120,120 lbs, A Klipstein & Co, Westerner, Antwerp
240 cks, 132,000 lbs, William Brodie, Nieuw Amsterdam, Rotterdam
LOGWOOD, EXTRACT—5 cks, Stanley Doggett, Inc, Hudson, Havre
220 bbls, Logwood Mfg Corp, W M Tupper, Cane Haitian
MAGNESIA, CALCINED—313 bgs, 2,600 lbs, Speiden Whitfield Co, New Amsterdam, Rotterdam
1,000 bgs, 200,000 lbs, Innis, Speiden & Co, New Amsterdam, Rotterdam
125 bgs, 25,000 lbs, A Kramer & Co, Westerner, Rotterdam
45 bbls, 22,500 lbs, A Kramer & Co, Westerner, Rotterdam
CHLORIDE—92 dms, A Kramer & Co, Tyrrhenia, Hamburg
31 dms, A Kramer & Co, Tyrrhenia, Hamburg
300 bbls, 150,000 lbs, Speiden Whitfield Co, Inc, Ohio, Hamburg
MANJAK—13 bbls, F W Glardon, Vasari, Barbados
MEDICINAL PREPARATIONS—4 cs, Burroughs, Wellcome & Co, Minnewaska, London
MENTHOL—10 cs, 600 lbs, Iwai & Co, Genoa Maru, Kobe
10 cs, 600 lbs, Far East Importing Co, Inc, Genoa Maru, Yokohama
MINERAL, WHITE—1,200 bgs, 240,000 lbs, Hammill & Gillespie, Galileo, Hull
NAPHTHALENE—365 bgs, 43,800 lbs, Jordan Coal Tar Prod Co, Elmsport, Rotterdam
1,702 bgs, 204,240 lbs, Lunham & Moore, Elmsport, Rotterdam
NUT GALLS—2 bgs, H R Lathrop & Co, Minnewaska, London
50 cs, Manufacturers' Trust Co, Diomed, Hankow
NUTMEGS—81 cs, Catz American Co, Vectdyk, Samarang
OIL, ALMOND—20 cs, 700 lbs, J B Horner, Patria, Marseilles
ANISE—1 dm, A Chiris & Co, Genoa Maru, Hong Kong

Ask An Advertiser—Or Be An Advertiser

BAY—19 cs, 760 lbs, G Preston, Edith, Marinabo
5 cs, 200 lbs, Santoni & Co, Ponce, Arroyo
5 cs, 200 lbs, A Chiris & Co, Ponce, Arroyo
1 cs, 40 lbs, Van Dyke Co, Ponce, Arroyo
4 cs, 160 lbs, D Steengrafe, Ponce, Arroyo
2 cs, 120 lbs, Lehn & Fink, Guiana, St Thomas
BIRCH TAR—12 bbls, C H Reisig, Verbania, London
CAMPHOR, BROWN—100 dms, Dodge & Olcott Co, Genoa Maru, Kobe
100 dms, Suzuki & Co, Hamburg Maru, Shanghai
100 dms, Dodge & Olcott Co, Hamburg Maru, Kobe
WHITE—13 dms, Suzuki & Co, Genoa Maru, Kobe
CARAWAY—1 cs, P R Dreyer, Niew Amsterdam, Rotterdam
CASSIA—5 dms, Magnus, Mabee & Raynard, Genoa Maru, Hongkong
CHINA WOOD—285 cks, 14,250 gls, G W S Patterson & Co, Diomed, Hankow
1,185 cks, 59,250 gls, Mitsui & Co, Diomed, Hankow
607 cks, 30,350 gls, Jardine, Matheson & Co, Diomed, Hankow
185 cks, 9,250 gls, Vicke, Blackwell & Buck, Diomed, Shanghai
144 cks, 7,200 gls, A Klipstein & Co, Genoa Maru, Hankow
300 bbls, 15,000 gls, Mitsubishi Shoji Kaisha, Hamburg Maru, Hankow
152 cks, 7,600 gls, F A Cundill & Co, Inc, Diomed, Hankow
1,827 cks, 91,350 gls, Bank of Manhattan, Diomed, Hankow
CINNAMON—9 dms, A Joensson & Co, Inc, Jeseric, Colombo
CITRONELLA—24 dms, 24,000 lbs, A Joensson & Co, Inc, Jeseric, Colombo
14 dms, 14,000 lbs, F R Henderson Co, Jeseric, Colombo
13 dms, 13,000 lbs, Geo Luederes & Co, Jeseric, Colombo
1 dm, 1,000 lbs, Equitable Trust, Vechtdijk, Batavia
1 dm, 1,000 lbs, Catz-American Co, Vechtdijk, Batavia
COAL TAR—5 pkgs, West Disinfectant Co, Mongolia, Hamburg
COCONUT—Bulk, Spencer, Kellogg & Sons, Diomed, Manila
COD—10 cks, 500 gls, Robt Badcock & Co, Silvia, St Johns
CODLIVER—200 bbls, 6,000 gls, Lehn & Fink, Topdalsfjord, Bergen
50 bbls, 1,500 gls, C L Huisking, Topdalsfjord, Bergen
250 bbls, 7,500 gls, consignee to follow, Topdalsfjord, Bergen
100 bbls, 3,000 gls, Burrough, Wellcome & Co, Topdalsfjord, Bergen
25 bbls, 750 gls, consignee to follow, Topdalsfjord, Bergen
COLZA—30 cks, 1,500 gls, Cook & Swan, Hudson, Havre
ESSENTIAL—4 cs, Polaks Frutal Works, Nieuw Amsterdam, Rotterdam
2 dms, F E Wallace & Co, Jeseric, Madras
9 cs, Geo Luederes & Co, Hansa, Hamburg
6 cs, Park & Tilford, Paris, Havre
1 cs, Alex Murphy & Co, Paris, Havre
58 cs, Rogers & Gallet, Paris, Havre
2 cs, J Dupont, Paris, Havre
47 cs, Chas Baez, Paris, Havre
7 cs, F M Prindle & Co, Paris, Havre
3 cs, Maurice Levy, Paris, Havre
1 cs, J Schaerer, Paris, Havre
8 cs, Lautier Fils, Paris, Havre
3 cs, P R Dreyer, Paris, Havre
14 cs, C W Sellers, Paris, Havre
45 cs, A H Smith & Co, Paris, Havre
3 cs, Morana, Inc, Paris, Havre
5 cs, Dodge & Olcott Co, Paris, Havre
18 cs, Geo Luederes & Co, Diomed, Singapore
2 cs, Ungerer & Co, Hudson, Bordeaux
5 cks, P R Dreyer, Patria, Marseilles
2 cs, Duval & Co, Patria, Marseilles
27 cs, Fritzsche Bros, Reliance, Hamburg
13 cs, Ungerer & Co, Mauretania, Southampton
7 cs, Geo Luederes & Co, Mauretania, Southampton
13 cs, Park & Tilford, Mauretania, Southampton
EUCALYPTUS—11 dms, Dodge & Olcott Co, Port Hunter, Sydney
FUSEL—12 drs, Gerhard & Hey, Nieuw Amsterdam, Rotterdam
GERANIUM—2 cks, A Chiris & Co, Patria, Marseilles
9 cks, Morana, Inc, Patria, Marseilles
HAARLEM—15 cs, 2,170 lbs, Esco Chem Corp, Nieuw Amsterdam, Rotterdam
LEMON—3 ½ cs, C L Huisking, Teresa, Messina
2 cs, Delphi Prod, Inc, Patria, Marseilles
LIME—3 drs, Fritzsche Bros, Guiana, Dominica
3 cs, Fritzsche Bros, Guiana, Dominica
12 cs, Planters Prod Co, Guiana, Dominica
13 cs, Planters Prod Co, Guiana, Dominica
LUBRICATING—40 bbls, W B Dick & Co, Ltd, Minnewaska, London
25 cks, L S Tainter, Hansa, Hamburg
NAPHTHA—14,000 bbls, 588,000 gls, Standard Oil Co, Victolite, Peru
OLIVE—123 cs, 1,230 gls, S La Magro, Teresa, Catania
75 bbls, 3,750 gls, National City Bank, Teresa, Catania
300 cs, 3,000 gls, Sciales Grocery Co, Conte Verdi, Genoa
30 cs, 300 gls, Parodi Erminio & Co, Conte Verdi, Genoa
225 cs, 2,250 gls, P Pastene & Co, Conte Verdi, Genoa
965 cs, 9,650 gls, various consignees, Conte Verdi, Genoa
350 cs, 3,500 gls, East River National Bank, Cabo Ortegal, Seville
500 cs, 5,000 gls, American Exchange National Bank, Cabo Ortegal, Seville
200 cs, 2,000 gls, Austin Nichols & Co, Cabo Ortegal, Seville
50 cs, 500 gls, State Bank, Cabo Ortegal, Seville
50 bbls, 2,500 gls, V Cairo & Co, Inc, Cabo Ortegal, Seville
800 cs, 8,000 gls, various consignees, Cabo Ortegal, Seville
150 bbls, 7,500 gls, Rome Importing Co, Cabo Ortegal, Seville
175 bbls, 8,750 gls, Briones & Co, Inc, Cabo Ortegal, Seville
1,000 cs, 10,000 gls, Briones & Co, Inc, Cabo Ortegal, Seville
50 bbls, 2,500 gls, N S Mantras, Cabo Ortegal, Seville
200 cs, 2,000 gls, N S Mantras, Cabo Ortegal, Seville
50 cs, 500 gls, East River National Bank, Cabo Ortegal, Seville
25 bbls, 1,250 gls, Strohmeyer & Arpe Co, Cabo Ortegal, Seville
25 bbls, 1,250 gls, Magnus, Mabee & Raynard, Cabo Ortegal, Seville
50 cs, 500 gls, Grosvenor Nicholas Co, Patria, Marseilles
100 bbls, 5,000 gls, Strohmeyer & Arpe Co, Patria, Marseilles
21 cs, 210 gls, R Wardle, Patria, Marseilles
50 cks, 2,500 gls, Lehn & Fink, Patria, Marseilles
70 cs, 700 gls, American Express Co, Patria, Marseilles
ORANGE—2 half cs, C L Huisking, Inc, Teresa, Messina
3 cs, H Triest & Co, Port Antonio, Kingston
PALM—134 cks, 6,700 gls, African & Eastern Trading Corp, Inc, Nieuw Amsterdam, Rotterdam
120 cks, 6,000 gls, African & Eastern Trading Corp, Inc, Nieuw Amsterdam, Rotterdam
PENNYROYAL—3 dms, Geo Luederes & Co, President Monroe, London
PETROLEUM, CRUDE—49,000 bbls, 2,058,000 gls, Asiatic Petroleum Co, Gulfoil, Tampico
45,000 bbls, 1,890,000 gls, Standard Oil Co, City of Freeport, Port Lobos
52,000 bbls, 2,184,000 gls, Asiatic Petroleum Co, San Zotica, Tampico
40,000 bbls, 1,680,000 gls, Standard Oil Co, Uncas, Tampico
RAPESED—100 bbls, 5,000 gls, Balfour, Williamson & Co, Galileo, Hull
100 bbls, 5,000 gls, Elbert & Co, Galileo, Hull
100 bbls, 5,000 gls, E S Kuh & Valk Co, Galileo, Hull
125 bbls, 6,250 gls, National City Bank, Galileo, Hull
SULPHUR—350 bbls, 17,500 gls, E H Weil, Teresa, Catania
500 bbls, 25,000 gls, E H Weil, Teresa, Trieste
650 bbls, 32,500 gls, National City Bank, Trieste
900 bbls, 45,000 gls, E H Weil, Cabo Ortegal, Seville
500 bbls, 25,000 gls, J B Dewsnap & Co, Ortegal, Seville
418 bbls, 20,900 gls, Equitable Trust Co, Ortegal, Seville
150 bbls, 7,500 gls, Chemical National Bank, Ortegal, Seville
500 bbls, 25,000 gls, Leghorn Trading Co, Ortegal, Seville
225 bbls, 11,250 gls, J B Dewsnap & Co, Ortegal, Seville
100 bbls, 5,000 gls, National City Bank, Ortegal, Seville
YLANG YLANG—7 cs, Geo Luederes & Co, Patria, Marseilles
OCHER, POWDERED—91 cks, 694,980 lbs, Reichard, Coulston Co, Inc, Patria, Marseilles
18 cks, 14,040 lbs, L H Butcher & Co, Patria, Marseilles
197 cks, 153,660 lbs, Scott L Libby & Co, Patria, Marseilles
ORANGE WATER—10 drs, Delphi Prod Co, Patria, Marseilles
PEPSIN—2 cs, R W Greef & Co, Minnewaska, London
PHENOL—1 cs, H W Peabody & Co, Minnewaska, London
PIMENTO—352 bgs, 45,760 lbs, A S Lascelles & Co, Bogota, Kingston
100 bgs, 13,000 lbs, Colonial Bank, Port Antonia, Kingston
PITCH—5 cks, Archos, Ltd, Galilio, Hull
BURGUNDY—100 stands, 12,000 lbs, Hensel, Bruckman & Lorbache, Mongolia, Hamburg
PLASTER—600 tons, J F Whitney & Co, C Maud Gaskel, Hillsboro
2,100 tons, J B King & Co, Glooscap, Hillsboro
1,850 tons, J B King & Co, Wildwood, Hillsboro
3,300 tons, J B King & Co, S W Faucher, Windsor
40 cks, Reichard Coulston, Inc, Patria, Marseilles
1,800 tons, J F Whitney & Co, Fredericia, Windsor
2,200 tons, Rock Plaster Mfg Co, Korsfjord, Walton
875 tons, J F Whitney & Co, Burpee L Tucker, Windsor
POTASH, CHLORATE—2,000 bbls, Irving Bank Columbia Trust Co, Hansa, Hamburg
PRUSSIATE, YELLOW—10 cks, 5,500 lbs, W A Foster & Co, Baltic, Liverpool
POTATO STARCH—500 bgs, 115,000 lbs, Spier, Simons & Co, Nieuw Amsterdam, Rotterdam
300 bgs, 69,000 lbs, Stein, Hall & Co, Nieuw Amsterdam, Rotterdam
ROOT, ARROW—31 cs, J P Smith & Co, President Monroe, London
GENTIAN—25 bls, Irving Bank-Columbia Trust Co, Hudson, Bordeaux
49 bls, Parke, Davis & Co, Hudson, Bordeaux
164 bls, 34,577 lbs, Murry & Nickells Mfg Co, Patria, Marseilles
GINGER—140 bgs, 18,200 lbs, Archibald & Lewis Co, Bogota, Kingston
LICORICE—1 bl, J L Hopkins & Co, Minnewaska, London
566 bls, Parke, Davis & Co, Hudson, Bordeaux
20 bgs, 2,200 lbs, Peek & Velsor, Patria, Marseilles
100 bgs, 22,000 lbs, McLaughlin, Gormley & King, Patria, Marseilles
MEDICINAL—3 bls, S B Penick & Co, Hansa, Hamburg
SARSAPARILLA—31 bls, 6,200 lbs, D L Bretzfelder & Bro, Yucatan, Tampico
ROSE WATER—10 demijohns, Delphi Prod, Inc, Patria, Marseilles
ROSIN—127 cks, Eastman Kodak Co, Callamer, Bordeaux
ROTTENSTONE—150 bgs, R J Waddell & Co, Galileo, Hull
SEED, ANISE—50 cs, 5,500 lbs, Wm Tuppenback, Hamburg Maru, Hongkong
CANARY—250 bgs, 27,500 lbs, F Young, Teresa, Catania
150 bgs, 16,500 lbs, A G Dunn, Nieuw Amsterdam, Rotterdam
2,671 bgs, 293,810 lbs, J J Toledano & Co, Hudson, Bordeaux
CARAWAY—50 bgs, 5,500 lbs, J Cane & Son, Nieuw Amsterdam, Rotterdam
100 bgs, 11,000 lbs, C E Armstrong, Inc, Nieuw Amsterdam, Rotterdam
CORIANDER—276 bgs, 30,300 lbs, J J Toledano & Co, Hudson, Bordeaux
CUMIN—108 bgs, 11,880 lbs, J J Toledano & Co, La Bourdonnais, Bordeaux
FOENUGREEK—57 bgs, A Joensson & Co, Inc, Verbania, London
MEDICINAL—12 bls, S B Penick & Co, Patria, Marseilles
MUSTARD—198 bgs, 39,600 lbs, R F Downing & Co, Saxonia, Liverpool
100 bgs, 20,000 lbs, Mechanic & Metal National Bank, Nieuw Amsterdam, Rotterdam
PARSLEY—135 bgs, W J Bush & Co, Hudson, Bordeaux
POPPY—150 bgs, 16,500 lbs, Levy & Levis Co, Nieuw Amsterdam, Rotterdam
300 bgs, 33,000 lbs, A G Dunn, Nieuw Amsterdam, Rotterdam
QUINCE—4 bgs, Brown Bros & Co, Minnewaska, London
RAPE—40 bgs, 4,400 lbs, Archibald & Lewis Co, Nieuw Amsterdam, Rotterdam
150 bgs, 16,500 lbs, Doughton Seed Co, Nieuw Amsterdam, Rotterdam
500 bgs, 55,000 lbs, American Express Co, Nieuw Amsterdam, Rotterdam
STROPHANTHUS—11 bgs, A Joensson & Co, Inc, Verbania, London
SUNFLOWER—409 bgs, 44,990 lbs, A G Dunn, Nieuw Amsterdam, Rotterdam
SHELLAC—632 bgs, 103,648 lbs, Rogers Pyatt Shellac Co, Aquitania, Southampton
400 bgs, 65,600 lbs, Rogers Pyatt Shellac Co, Minnewaska, London
100 bgs, 16,400 lbs, Rolli Bros, Minnewaska, London
31 cs, 5,084 lbs, A Hurst & Co, Niew Amsterdam, Rotterdam
200 bgs, 32,800 lbs, Rogers Pyatt Shellac Co, Verbania, London
GARNET LAC—45 bgs, 7,380 lbs, Kasebier Chatfield Shellac Co, Mongolia, Homburg
STICKLAC—5 cs, D L Silverman, Diomed, Penang
SOAP—50 cs, Geo Borgfeld & Co, Cabo Ortegal, Seville
SODA, FLUORIDE SILICO—200 bgs, J C Wiarda & Co, Niew Amsterdam, Rotterdam
HYPOSULPHITE—398 cks, E Suter & Co, Patria, Marseilles
NITRATE—11,400 bgs, E I Dupont de Nemours & Co, Eliro, Iquique
1,885 bgs, W R Grace & Co, Santa Elsia, Antofagasta
9,962 bgs, W R Grace & Co, Santa Elisa, Iquique
NITRITE—250 cks, 128,510 lbs, Kuttroff, Pickhardt & Co, Tyrrhenia, Hamburg
SULPHATE—250 bgs, Roessler & Hasslacher Chem Co, Hansa, Hamburg
SULPHIDE—405 drs, C S Grant & Co, Mongolia, Hamburg
SPONGES—30 bls, 3,000 lbs, Atlas Sponge Co, Pastores, Havana
48 bls, 4,800 lbs, Johns Manville, Inc, Pastores, Havana
58 bls, 5,800 lbs, A Osaacs & Co, Orizaba, Orizaba
55 bls, 5,500 lbs, National Sponge & Chamois Co, Orizaba, Havana
14 bls, 1,400 lbs, American Sponge & Chamois Co, Munargo, Nassau
12 bls, 1,200 lbs, J H Rhodes & Co, Munargo, Nassau
SUMAC, EXTRACT—15 cks, American Dyewood Co, Cameronia, Glasgow
TALC—1,900 bgs, 380,000 lbs, L A Salomon & Bro, La Bourdonnois, Bordeaux
800 bgs, 160,000 lbs, Moore & Munger, La Bourdonnois, Bordeaux
600 bgs, 120,000 lbs, Whittaker, Clark & Daniels, La Bourdonnois, Bordeaux
50 cs, Whittaker, Clark & Daniels, La Bourdonnois, Bordeaux
10 cks, L Blanc Walther, La Bourdonnois, Bordeaux
500 bgs, 100,000 lbs, Hammill & Gillespie, La Bourdonnois, Bordeaux
120 cs, Binney & Smith Co, La Bourdonnois, Bordeaux
200 bgs, 40,000 lbs, C B Chrystal, Hudson, Bordeaux
300 bgs, 60,000 lbs, Whittaker, Clark & Daniels, Hudson, Bordeaux
800 bgs, 160,00 lbs, Moore & Numger, Hudson, Bordeaux
100 cs, Perfumery de Luxe, La Bourdonnais, Bordeaux
TAPIOCA, FLAKE—599 bgs, Stein, Hall & Co, Vechtdijk, Surabaya
FLOUR—825 bgs, Balfour, Williamson & Co, Vechtdijk, Batavia
575 bgs, Java American Export Co, Vechtdijk, Batavia
1,013 bgs, Balfour, Williamson & Co, Vechtdijk, Surabaya
13,222 bgs, Stein, Hall & Co, Vechtdijk, Surabaya
PEARL—646 bgs, Stein, Hall & Co, Vechtdijk, Surabaya
1,998 bgs, J W Phyfe & Co, Diomed, Penang
TARTAR, CRUDE—313 bgs, Chas Pfizer & Co, Cabo Ortegal, Seville
240 bgs, Tartar Chem Works, Hudson, Bordeaux
91 bgs, Chas Pfizer & Co, Hudson, Bordeaux
271 bgs, Chas Pfizer & Co, Patria, Bordeaux
271 bgs, Tartar Chem Works, Patria, Bordeaux
TERPINEOL—4 cs, 580 lbs, G Gross Co, Collamer, Bordeaux
THYMOL—10 cs, Geo Luederes & Co, Hansa, Hamburg
VARNISH—2 cs, Favor, Ruhl & Co, Hudson, Havre
VENETIAN RED—150 cks, 82,500 lbs, J Lee Smith & Co, Baltic, Liverpool
WASHING BLUE—250 bgs, Reckitts, Ltd., Galileo, Hull
WAX, BEES—12 bgs, 1,800 lbs, General Comi Co, Ebro, Coquimbo
101 bgs, 15,150 lbs, Strohmeyer & Arpe Co, Santa Elisa, San Antonio
100 cs, 7,000 lbs, Strohmeyer & Arpe Co, Paris, Havre
47 bgs, 7,050 lbs, Strohmeyer & Arpe Co, Orizaba, Havana
50 bgs, 7,500 lbs, De Luna, Correa & Cortissoz, Gen W C Gorgas, South American ports
PARAFFIN—1,360 bgs, 204,000 lbs, Asiatic Petroleum Co, Verbania, London
WHITING—1,500 bgs, 300,000 lbs, Whittaker, Clark & Daniels, Zeeland, Antwerp
2,174 bgs, 434,800 lbs, Industrial Products Corp, Hudson, Havre
WOOD, FLOUR—983 bgs, 110,000 lbs, International Acceptance Bank, Tyrrhenia, amburg
983 bgs, 117,960 lbs, Innis, Speiden & Co, Ohio, Hamburg
1,500 bgs, 180,000 lbs, B L Soberski, Topdalsfjord, Greaker
WOOL GREASE—90 bbls, 33,750 lbs, Elbert & Co, Westerner, Antwerp
50 bbls, 18,750 lbs, A Klipstein & Co, Baltic, Liverpool
71 cs, Johnson & Johnson, Minnewaska, London
ZINC OXIDE—33 cks, L H Butcher, Baltic, Liverpool
100 bbls, 27,000 lbs, L H Butcher, Patria, Marseilles
20 cks, Houbigant, Inc, Mauretania, Southampton
RESINATE—10 cks, Red Hand Composition Co, Minnewaska, London

Imports at New York in Transit

AMMONIA, SULPHATE—8,360 bgs, 1,672,000 lbs, City of Tokio, Sydney, Yokohama
BARK, PERUVIAN—150 bls, O T Olsen & Co, Eliro Paita, Havre
CHARCOAL—25 bgs, G W Sheldon & Co, Hull, Chicago
COPRA—488 bgs, 68,440 lbs, Port Antonio, Annatto Bay, Rotterdam
GUM, KAURI—150 bgs, 33,000 lbs, Canadian Ranger, Auckland, Kirkcaldy
170 bgs, 37,400 lbs, L C Gillespie & Sons, Canadian Ranger, Auckland, Montreal
122 cs, 26,840 lbs, S Winterbourne & Co, Port Hunter, Auckland, London
131 bgs, 28,820 lbs, S Winterbourne & Co, Port Hunter, Auckland, London
114 bgs, 25,080 lbs, J D Lewis, Port Hunter, Auckland, London
200 bgs, 44,000 lbs, A Klipstein & Co, Port Hunter, Auckland, Amsterdam
134 bgs, 29,480 lbs, A Klipstein & Co, Port Hunter, Auckland, Bremen
LOGWOOD EXTRACT—100 cks, 40,000 lbs, West Indies Chem Works, Bogota, Kingston, Liverpool
23 cks, 9,200 lbs, Port Antonio, Black River, Hull, Liverpool
30 cks, 12,000 lbs, West Indies Chem Works, Martinique, Kingston
20 cks, 8,000 lbs, West Indies Chem Works, Martinique, Kingston, Antwerp
25 cks, 10,000 lbs, West Indies Chem Works, Martinique, Kingston, Genoa
PAINT—395 kgs, New York & Porto Rico S S Co, Minnewaska, London, Porto Rico
PIMENTO—200 bgs, 26,000 lbs, A S Lascelles & Co, Bogota, Kingston, Toronto
500 bgs, 65,000 lbs, A S Lascelles & Co, Bogota, Kingston, Hamburg
150 bgs, 19,500 lbs, Port Antonio, Black River, Alexandria
ROOT, GINGER—82 bgs, 10,600 lbs, Port Antonio, Kingston, London
SPONGES—77 bls, 7,700 lbs, Orizaba, Havana, London
32 bls, 3,200 lbs, Cunard S S Co, Munargo, Nassau, London
31 bls, 3,100 lbs, American Sponge & Chamois Co, Munargo, Nassau, Amsterdam
45 bls, 4,500 lbs, Munargo, Nassau, Paris
TAPIOCA FLOUR—882 bgs, 123,480 lbs, National City Bank, Vechtdijk, Cherebon, Chicago
VARNISH—25 cs, American Express Co, Minnewaska, London, Chicago

Imports at Baltimore

ORE, MANGANESE—6,955 tons, The Iron & Ore Corp of America, Tenbergen, Poti
6,700 tons, U S Steel Products Co, Pruth, Calcutta
PETROLEUM, CRUDE—43,000 bbls, Standard Oil Co of N J, Republic, Tampico
55,000 bbls, Standard Oil Co of N J, Vaarle, Tampico
POTASH, KAINIT—10,335,000 kilos, Societte Comi des Potasses d'Alsace, Caledonier, Antwerp
1,000 bgs, Societe Comi des Potasses d'Alsace, Caledonier, Antwerp
MANURE SALT—463,151 kilos, Societe Comi des Potasses d'Alsace, Caledonier, Antwerp
MURIATE—3,080 bgs, Societe Comi des Potasses d'Alsace, Caledonier, Antwerp
SULPHATE—834 bgs, Societe Comi des Potasses d'Alsace, Caledonier, Antwerp

Imports at Boston

ASBESTOS—1,250 bgs, W D Crumpton & Co of New York, Belgian, London
CRUDE—463 bgs, 74,080 lbs, W D Crumpton of New York, Sandgate Castle, Beira
BRISTLES—37 cs, John L Whiting-J J Adams Co, Belgian, London
9 cs, A V Berner & Co, Inc, Belgian, London
CHALK—1,000 bgs, 110,230 lbs, Mediterranean & General Traders of New York, Sahale, Rotterdam
500 bgs, 110,230 lbs, L H Butcher Co, Inc, of New York, Antwerp
1,000 bgs, 110,230 lbs, Irving Bank-Columbia Trust Co, Sahale, Antwerp
1,000 bgs, 110,230 lbs, Mediterranean & General Traders of New York, Sahale, Antwerp
410 tons, Belgian, London
GROUND—6,000 bgs, Brooklyn Trust Co, Belgian, London
COCONUT, DESIC—100 bgs, Jeseric, Colombo
COLOR, ANILINE, DRY—14 cks, I Levenstein & Co, Inc, Norwegian, Liverpool
DRUGGISTS SUNDRIES—3 cs, Belgian, London
DYESTUFF—1 cs, A C Lawrence, M S Dollar, Genoa
EMERY—1 cs, Graham & Strake, Belgian, London
140 kgs, American Glue Co, Belgian, London
FERTILIZER—20 bgs, Fottler-Fiske-Rawson Co, Belgian, London
FIR BALSAM—18 bgs, San-I-Sal Laboratories, Prince George, Yarmouth
GELATIN, PLATES—275 bls, Edwin A Rogers & Co, M S Dollar, Marseilles
100 cs, Edwin A Rogers & Co, M S Dollar, Marseilles
POWDER—100 bbls, Edwin A Rogers & Co, M S Dollar, Marseilles
GLASS—4 cs, Chas J Connick, Belgian, London
1 cs, Belgian, London
PLATE—10 cs, 19,290 lbs, Boston Plate & Window Glass Co, Sahale, Antwerp
6 cs, 12,147 lbs, Standard Plate Glass Co, Sahale, Antwerp
1 cs, French American Banking Corp, Belgian, Antwerp
PLATE, POLISHED—54 cs, Brown Bros Co, Belgian, Antwerp
WINDOW—100 cs, 6,614 lbs, Simon, Bache & Co of New York, Sahale, Antwerp
200 cs, 13,228 lbs, Sahale, Antwerp
2,172 cs, American Express Co, Belgian, Antwerp
GLUE, FLAKED—100 bgs, J B Moors & Co, Norwegian, Liverpool
MARINE—90 cs, L W Ferdinand & Co, Belgian, London
180 dms, L W Ferdinand & Co, Belgian, London
16 crts, L W Ferdinand & Co, Belgian, London
GLUESTOCK, FISH CLIPPINGS—1 bbl, J K Dennis, Prince George, Yarmouth
1 bbl, Nickerson & Nickerson, Prince George, Yarmouth
FISH HEADS—1 bbl, J A Rich Co, Prince George, Yarmouth
FISH SKINS—7 bbls, Rogers Isinglass & Glue Co of Gloucester, Mass, Prince Arthur, Yarmouth
1 bbl, H S Demeritt, Prince George, Yarmouth
25 bgs, Rogers Isinglass & Glue Co of Gloucester, Mass, Prince George, Yarmouth
22 bgs, E A Malone, Prince George, Yarmouth
HIDE CUTTINGS—126 bgs, Ashworth Speakman Co, Norwegian, Liverpool
447 bgs, Baring Bros & Co, Ltd, Norwegian, Manchester
GREASE—70 bbls, J S Bent & Co, Belgian, London
GUM, COPAL—410 bgs, 46,098 lbs, Central Union Trust Co of New York, Sahale, Antwerp
HAIR, HORSE—5 cs, Belgian, London
IRON OXIDE—10 cks, T D Downing & Co, Barrymore, Liverpool
MINERAL WATER—2 cs, S S Pierce Co, Belgian, London
OCHER—70 cks, L H Bucher Co, M S Dollar, Marseilles
OIL, ANTHRACENE—100 bbls, Belgian, London
COD—1 ck, C Jeffery, Prince George, Yarmouth
OLIVE—100 cs, 10,097 lbs, T Terrile, M S Dollar, Genoa
100 cs, 13,328 lbs, L Le Conte & Co, M S Dollar, Genoa
1,500 cs, 154,322 lbs, Musolino & Berger, M S Dollar, Genoa
50 cs, 6,393 lbs, M J Caplan & Co, Inc, M S Dollar, Genoa
200 cs, 23,810 lbs, Eugenio Testa, M S Dollar, Genoa
50 cs, 6,415 lbs, Condati Nicola, M S Dollar, Genoa
110 cs, 13,558 lbs, G Zuffanti, M S Dollar, Genoa
100 cs, 12,367 lbs, Orient Coffee Impt & Ex Co, M S Dollar, Genoa
210 cs, 25,900 lbs, Re Bros, M S Dollar, Genoa
925 cs, 115,954 lbs, P Pastene & Co, Inc, M S Dollar, Genoa
395 cs, 143,619 lbs, S S Pierce Co, M S Dollar, Genoa
301 cs, 37,882 lbs, Calderone & Grillo, M S Dollar, Genoa
100 cs, 12,566 lbs, L Avanzino & Bros, M S Dollar, Genoa
100 cs, 12,280 lbs, Segal Bros, M S Dollar, Genoa
200 cs, 25,066 lbs, J R Dagnino & Co, M S Dollar, Genoa
200 cs, 25,573 lbs, L Le Conte & Co, M S Dollar, Genoa
50 cs, 6,371 lbs, Michele Lenti, M S Dollar, Genoa
50 cs, 6,239 lbs, Richmond Impt Co, M S Dollar, Genoa
50 cs, 6,393 lbs, Sparta Trading Co, M S Dollar, Genoa
100 cs, 10,582 lbs, Musolino & Berger, M S Dollar, Genoa
50 cs, 5,942 lbs, F Romeo & Co, M S Dollar, Genoa
100 cs, 11,809 lbs, Union Impt Co, M S Dollar, Genoa
205 cs, 15,906 lbs, Re Bros, M S Dollar, Genoa
50 cs, 5,952 lbs, E G Tophos, M S Dollar, Genoa

500 cs, 51,808 lbs, Musolino & Berger, M S Dollar, Genoa
50 cs, 6,173 lbs, T D Downing & Co, M S Dollar, Genoa
110 cs, 13,977 lbs, Orient Coffee Impt & Ex Co, M S Dollar, Genoa
250 cs, 32,176 lbs, Scaramelli & Co, M S Dollar, Genoa
50 cs, 5,291 lbs, F Romeo & Co of New York, M S Dollar, Genoa
100 cs, 10,582 lbs, Musolino & Berger, M S Dollar, Genoa
OLIVE, BOTTLES—200 cs, S S Pierce & Co, M S Dollar, Marseilles
30 cs, Maynard & Childs, M S Dollar, Marseilles
OLIVE, TINS—40 cs, S S Pierce & Co, M S Dollar, Marseilles
40 cs, M S Dollar, Marseilles
27 cs, Wm Stearns & Co, M S Dollar, Marseilles
PEANUT—7 cks, 3,228 lbs, Lamont, Corliss & Co, Sahale, Rotterdam
COD—20 cks, Norwegian, Liverpool
PEPPER, BLACK, LAMPONG—498 bgs, Catz American Co, Inc, of New York, M S Dollar, Batavia
POTASH, PERCHLORATE—223 bbls, 53,814 lbs, Asia Banking Corp of New York, Sahale, Antwerp
SAGO, FLOUR—370 bgs, Roman Prince, Singapore
SALTS, MEDICINAL—68 cs, Angler Chemical Co, Belgian, London
SEAWEED—30 bls, 7,131 lbs, Brown Bros & Co, Sahale, Antwerp
SEEDS, ANISE—21 bgs, M S Dollar, Marseilles
CORIANDER—55 bgs, M S Dollar, Marseilles
SILVER SAND—1,212,530 lbs, Brown Bros & Co, Sahale, Antwerp
SOAP—2 cs, Lever Bros Co, Belgian, London
41 cs, S S Pierce Co, Belgian, London
422 cs, Lockwood, Brackett & Co, Belgian, London
SADDLE—2 cs, S S Pierce Co, Belgian, London
SODA, NITRATE—41,385 bgs, John G Hall & Co, Charlton Hall, from Callao, Iquique and Caleta Buena
STARCH, SOLUBLE—25 bgs, 2 tons, 1,162 lbs, J P Marston Co, Conehatta, by transshipment at Baltimore from str Blair, from Manchester, Eng
TAPIOCA FLOUR—640 bgs, Catz American Co, Inc, of New York, M S Dollar, Batavia
524 bgs, First National Corp of New York, M S Dollar, Batavia
VARNISH, OIL—1 cs, Kelvin & W B White Co, Belgian, London

Imports at Boston in Transit

BONE MEAL—500 bgs, Belgian, Antwerp, Norfolk
DYEWOOD—2,300 bgs, First Nat Bank of Lynchburg, Va, Songelo, Barabona, Norfolk
GLASS, WINDOW—272 cs, 15,379 lbs, Virginia Mirror Co of Martinsville, Va, Sahale, Antwerp
OIL, OLIVE—100 cs, 11,905 lbs, F Cippoli & Son, M S Dollar, Genoa, Providence
50 cs, 50,494 lbs, Frank P Ventrone, M S Dollar, Genoa, Providence
80 cs, 8,411 lbs, Musolino & Berger, M S Dollar, Genoa, Buffalo
50 cs, 6,250 lbs, Thos Marcello, M S Dollar, Genoa, Providence
50 cs, 6,250 lbs, Galleni & Monchetti, M S Dollar, Genoa, Providence
50 cs, 5,842 lbs, L A Manzi, M S Dollar, Genoa, Worcester, Mass
60 cs, 7,738 lbs, M Mobile & Co, M S Dollar, Genoa, Hartford, Conn
55 cs, 7,143 lbs, Guiseppe Giusti, M S Dollar, Genoa, Providence
153 cs, 8,748 lbs, M S Dollar, Marseilles, San Pedro
300 cs, 37,941 lbs, G Lingua & Co, M S Dollar, Marseilles, San Pedro
150 cs, 18,519 lbs, G Pinma, M S Dollar, Marseilles, San Pedro
SOAP, COMMON—50 cs, 3,150 lbs, S W Miller & Co, M S Dollar, Marseilles, San Pedro
1 cs, 49 lbs, Calixte Bousquet, M S Dollar, Marseilles, San Pedro
SULPHUR—1 pkg, Prof Doran, assistant research professor of botany in Massachusetts Agricultural College, M S Dollar, Marseilles, Massachusetts State Experimental Farm at Lexington, Mass

Imports at Philadelphia

AMMONIA, NITRATE—194 cks,, Kuttroff, Pickhardt & Co, Furst Bulow, Hamburg
BARYTES—1 lot, Corn Exchange Natl Bank, Eisenach, Bremen
1 lot, Philadelphia Bank, Eisenach, Bremen
BLEACH—25 cks, Zellner Bros, Haverford, Liverpool
BONE MEAL—8,000 bgs, Egremont, Harachi
BONES—172 bgs, Chickahoming, London
1,265 bgs, Bird City, Santos
INDUSTRIAL—554 bgs, Bird City, Buenos Aires
CHALK—500 tons, Brown Bros & Co, Chickahoming, Hirachi
CLAY—125 cks, Brown Bros & Co, Eisenach, Bremen
FERTILIZER—55 bgs, O G Hempstead & Co, Chickahoming, London
COLORS—2 cs, F Weber & Co, Eisenach, Bremen
EARTH, FULLER'S—250 bgs, L A Solomon & Bro, Chickahoming, London
ESSENCE—½ cs, Giovani Mariano, Luxpallie, Messina
FLAXSEED—3,901 bgs, Louis Dreyfus Co, Bird City, Buenos Aires
FLOWERS, CHAMOMILE—50 bls, West Lashaway, Trieste
CHRYSANTHEMUM—6 bls, West Lashaway, Trieste
FLUORSPAR, GRAVEL—297 tons, Manchester Importer, Manchester
209,960 kilos, American Steel Exp Co, Furst Bulow, Hamburg
354,180 kilos, American Steel Exp Co, Furst Bulow, Hamburg
GROUND—200 bgs, Manchester Importer, Manchester
GLYCERIN—50 cks, Luxpallie, Marseilles
GREASE—1 bbl, Ault & Wiborg Co, Chickahoming, London
HORN PITHS—1,632 bgs, G B Ritchie & Co, Bird City, Buenos Aires
MAGNESIUM, CHLORIDE—730 dms, Irving National Bank, Furst Bulow, Hamburg
MANGANESE, FERRO—100 tons, Rogers, Brown & Co, Barrymore, Liverpool
SULPHATE—10 cks, Manchester Importer, Manchester
NAPHTHALINE—10 dms, Furst Bulow, Hamburg
OIL, LINSEED—893 bbls, Chickahoming, London
OLIVE—13 cs, A Francesco, Luxpallie, Naples
700 cs, West Lashaway, Leghorn
6 cks, Luxpallie, Palermo
13 bbls, A Tomasso, Luxpallie, Messina
OLIVE, SULPH—200 bbls, Fourth Street National Bank, West Lashaway, Monopoli
150 cs, Luxpallie, Genoa
PALM—78 cks, Fourth St National Bank, Haverford, Liverpool
ORE, CHROME—1,500 tons, Egremont, Madras
IRON, MAGNETIC—6,922,800 kilos, Park, Williams Co, Oxelsund, Lulia
7,500 tons, Bethlehem-Cuba Iron Mining Co, Vasconia, Santiago
MANGANESE—4,020 tons, E J Lavino Co, Asator, Bahia
PETROLEUM—19,000 bbls, Mexican Crude Oil Co, Vaba, Tampico
26,000 bbls, Paunca Boston Co, Vaba, Tampico
POTASH, MURIATE—2,249 bgs, Potash Importing Co, Furst Bulow, Hamburg
ROOTS—9 bls, West Lashaway, Trieste
LICORICE—8,236 bls, McAndrews & Forbes, Carson, Smyrna
192 sacks, McAndrews & Forbes, Carson, Smyrna
SEED, MUSTARD—150 cs, A Murphy Co, Barrymore, Liverpool
RAPE—25 bgs, Chickahoming, London
387 bgs, Bird City, Buenos Aires
SINEWS—1,500 bls, Egremont, Harachi
SOAP, CLEANING—14 bbls, Stanmore, Glasgow
SADDLE—2 cs, Kennedy, Willing Co, Chickahoming, London
SOFT—3 dms, F G Hempstead, Chickahoming, London
SODIUM, SULPHIDE—76 dms, E I Du Pont de Nemours & Co, Furst Bulow, Hamburg
STARCH, SOLUBLE—7 kgs, E H Bailey & Co, Manchester Importer, Manchester
SUMAC, EXTRACT—40 cks, American Dyewood Co, Stanmore, Glasgow

Imports at San Francisco

ALBUMEN—10 cs, S L Jones & Co, President Cleveland, Shanghai
10 cs, Sandaw Haase Co, President Cleveland, Shanghai
ALKALI—5 cs, Luen Chang, President Cleveland, Hong Kong
5 cs, Him Sing Chang, President Cleveland, Hong Kong
BLOOD, DRIED—1,915 bgs, President Hayes, Buenos Aires
781 bgs, H J Baker & Co, President Hayes, Buenos Aires
BLUE—20 cs, Centurion, Liverpool
BONE MEAL—840 bgs, President Hayes, Buenos Aires
BONES—6 lots bulk, President Hayes, Buenos Aires
5,324 bgs, T M Duche & Son, President Hayes, Buenos Aires
1,363 bgs, President Hayes, Buenos Aires
220 bgs, President Hayes, Buenos Aires
CAMPHOR, REFINED—21 cs, Mitsui & Co, Rakuyo Maru, Hong Kong
CASSIA — 50 cs, Bank of California, N A, Rakuyo Maru, Hong Kong
COCONUTS—1 bg, Mexican Consulate, Colima, Manzanillo
COCONUT, DESICCATED—51 cs, Willits & Co, President Cleveland, Colombo
150 cs, American Trading Co, President Cleveland, Colombo
358 cs, De Martini Supply Co, President Cleveland, Colombo
300 cs, President Cleveland, Colombo
300 cs, Dodwell & Co, Ltd, President Cleveland, Colombo
COLORS—10 cs, Pascal Dubedat & Co, Texas, Bordeaux
COPPER SULPHATE—200 cks, Balfour Guthrie & Co, Centurion, Liverpool
COPRA—277 tons, Wightman & Crane, Doris Crane, Fanning Islands
FERRO- MANGANESE—225 tons, Rogers Brown & Co, Centurion, Liverpool
100 tons, Crocker Bros, Centurion, Liverpool
25 cks, Crocker Bros, Inc, Centurion, Liverpool
200 tons, Balfour, Guthrie & Co, Centurion, Liverpool
FERTILIZER, CRACKLINGS—462 cks, President Hayes, Buenos Aires
TANKAGE—2,400 bgs, H J Baker & Bro, President Haves, Buenos Aires
830 bgs, President Hayes, Buenos Aires
839 bgs, President Hayes, Montevideo
FLAXSEED — 2,559 bgs, President Hayes, Buenos Aires
GLASS, PLATE—5 cs, Joseph Casse, Centurion, Liverpool
129 cs, W P Fuller & Co, Texas, Antwerp
WINDOW—32 cs, De Luxe Windshield Co, Centurion, Glasgow
10 cs, Dinsmore Bros, Centurion, Glasgow
14 cs, Goodman & Paige, Centurion, Glasgow
21 cs, Habenicht & Howlett, Centurion, Glasgow
49 cs, Automobile Glass House, Centurion, Glasgow
3 cs, Schwarz & Gottlieb, Centurion, Glasgow
3 cs, P A Smith Co, Centurion, Glasgow
38 cs, Pioneer Plate Window Glass Co, Centurion, Liverpool
41 cs, Goodman & Paige, Centurion, Liverpool
24 cs, Freedman Bros, Centurion, Liverpool
5 cs, Cobbledick-Kibbe Glass Co, Centurion, Liverpool
2 cs, Habenicht & Howlett, Centurion, Liverpool
1,790 cs, Texas, Antwerp
20 cs, French-American Banking Corp, Texas, Antwerp
IRON OXIDE—5 cks, Joseph A McNulty, Centurion, Liverpool
OIL, CHINA WOOD—50 bbls, Rakuyo Maru, Hongkong
59 bbls, President Cleveland, Hongkong
1 lot in bulk, President Cleveland, Hongkong
COCONUT—2,617,054 lbs, Dilworth, Cebu
OLIVE—200 cs, Centurion, Liverpool
PALM—5 cks, Balfour, Guthrie & Co, Centurion, Liverpool
PEANUT—30 cs, Shun Yuen Hing Co, President Cleveland, Hongkong
150 cs, Sui Tai, President Cleveland, Hongkong
70 cs, Yee Chang Lung, President Cleveland, Hongkong
RAPESEED—15 cs, Mutual Supply Co, President Cleveland, Kobe
SESAME—3 cs, Hong Far Law, President Cleveland, Hongkong
OILCAKE, COTTONSEED MEAL—1 cs, Balfour, Guthrie & Co, Centurion, Liverpool
PAINT—397 cs, Bass-Hueter Paint Co., Pres Hayes, Rio de Janeiro
QUEBRACHO EXTRACT—4,068 bgs, Pres Hayes, Buenas Aires
SAND, SILVER—1 lot in bulk, Anglo & London, Paris National Bank, Texas, Antwerp
SODA, CAUSTIC—10 cs, Balfour, Guthrie & Co., Centureon, Liverpool
NITRATE—2,250 bgs, order, Jeptha, Antofagasta
STARCH—64 cs, Wo Kee Co, Pres Cleveland, Hongkong
10 cs, Shun Yuen Hing Co, Pres Cleveland, Hongkong
TURPENTINE—200 cs, Colima, Manzanillo
VARNISH, BLACK—30 drms, Jos Johnson & G M Jocelyn & Co, Centurion, Liverpool
108 cs, Bass Hueter Paint Co, Pres Hayes, Rio de Janeiro
WHITING—1,143 bbls, East Asiatic Co, Inc, Kobenhaven, Morrisundy
320 bbls, East Asiatic Co, Inc, Kobenhaven, Morrisundy

Containers Returned

BARRELS—180, Tidewater Oil Co, Edith, Ponce
210, West India Oil Co, Edith, Mayaguez
200, West India Oil Co, Edith, Aguadilla
35, West India Oil Co, Orizaba, Havana
70, West India Oil Co, Fort Victoria, Hamilton
400, Grasselli Chem Co, W D Munson, Havana
100, West India Oil Co, Carna, Maracaibo
CARBOYS—334, Cuban-American Sugar Co, Orizaba, Havana.
30, Melchior, Armstrong & Dessau, Carna, Puerto Cabello
CYLINDERS—7, C Esteva, Ponce, Ponce
13, Linde Air Products Co, San Lorenzo, San Juan
14, Melchior, Armstrong & Dessau, San Lorenzo, San Juan
9, Liquid Carbonic Co, San Lorenzo, San Juan
27, H R Jenny, Limon, Tela
3, Liquid Carbonic Co, Guiana, St Thomas
12, National Ammonia Co, Jeseric, Madras
5, National Ammonia Co, Port Hunter, Auckland
10, Pan-American Supply Co, Inc, Zulia, Maracaibo
22, T F Turull & Co, Orizaba, Havana
11, Liquid Carbonic Co, Gen W C Gorgas, Port au Prince
37, Carr Bros, Yucatan, Tampico
83, Tupman, Thurlow & Co, Inc, Hamburg Maru, Shanghai
49, Liquid Carbonic Co, Martinique, Puerto Colombia
4, W R Grace & Co, Songelv, Monte Cristy
DRUMS—217, The Texas Co, Edith, Ponce
9, Young & Hyde, Ponce, San Juan
59, Standard Oil Co, Bergensfjord, Christiania
10, Purdy & Henderson, Munargo, Nassau
133, Asiatic Petroleum Co, Yucatan, Tampico
75, Grasselli Chem Co, W D Munson, Havana

Recent Charters

ASPHALT—200 tons, Sch Mayflower, Boston to St John
FERTILIZER, PHOSPHATE ROCK — 400 tons, Sch Peaceland, Everett to St Stephen
4,600 tons, S S Peter H Crowell, Port Tampa to Baltimore
2,000 tons, Sch Zebedee E Cliff, Port Tampa to Baltimore
TANKAGE—350 tons, Sch Stewart T Salter, Portsmouth to Stephen
PETROLEUM, CRUDE—3,030 tons, S S Castant, United States Gulf to Philadelphia, 27c, prompt
4,072 tons, S S Commodore, Gulf to Alexandria, 30s, October
3,202 tons, S S Gulfoil, Tampico to Texas City, 13c, September
— tons, Tanker, New Orleans to Philadelphia, 28c, September
4,384 tons, S S Rerbyline, United States Gulf to Philadelphia, 25c, September
4,885 tons, S S Dungannon, Mexico to Philadelphia, 25c, prompt
SULPHUR—3,140 tons, S S Strassa, Freeport and Sabine to Quebec, Botwood & Gaspe, private terms, September

BRADLEY STENCIL MACHINE

Makes stencils in half a minute at a reduced cost of 1—10 cents each. In universal use by thousands of manufacturers and shippers.
Write for Catalogue and Price List
A. J. BRADLEY
GENERAL SALES AGENT
101 Beekman St. New York, U. S. A.
Manufacturers of all kinds of Oil Stencil Board

DISMANTLING
Entire Plant, Buildings, Machinery & Equipment of
N. K. FAIRBANK CO.
(GOLD DUST TWINS)
Wentworth Ave. from 18th to 20th St.
CHICAGO, ILL.
Which we have purchased and must remove from the premises within a limited time. Consequently we are making extraordinarily low prices. Material consisting of:
Complete glycerine, soap, hydrogenating, oil refining plants. Evaporators, over a thousand tanks of all sizes, including mixing and scale tanks, hundreds of steam pumps, engines and fans, can making equipment, pulleys, belting, hangers, shafting, pipe, structural steel and building material.
Send in your inquiries or come and inspect this plant as we can no doubt fill your requirements. Do not delay, as everything is subject to prior sale.
American House Wrecking Co
229 W. 19th St. Chicago, Ill.
Telephone Victory 9237

Nitrate Reports Differ

(Continued from page 20)

tion and that it might be possible to harmonize the apparently conflicting views. Dr. Francis Walker, chief economist for the commission, says that nitrate combinations come and go.

Dr. H. Foster Bain, director of the Bureau of Mines, who has been studying the nitrate situation in Chile, agrees with the Federal Trade Commission to the extent that Chileans control the industry, but he denies that the nitrate producers' association is a trust. Dr. Bain is out of town this week, clearing up odds and ends of information preparatory to submitting a final report on the Chilean situation to Dr. Curtis of the Department of Commerce.

N.P.A. Meeting This Week

This year's regular meeting of the National Petroleum Association will open Wednesday of the current week at Atlantic City. Headquarters will be at the Hotel Traymore, and the session will occupy three days. The annual banquet will be given Friday evening at the Hotel Shelbourne.

Cincinnati Paint Club Golf Match Won by Beschorman

CINCINNATI, Sept. 12, 1923.

With the lowest net score of 77, W. C. Beschorman, of the National Lead Co., carried off the honors in the seventh golf match of the Cincinnati Paint Golf Club at the Hyde Park Country Club yesterday afternoon. Mr. Beschorman's prize, a dozen golf balls, was donated by B. H. Roettker of the B. H. Roettker Co.

Scores of the players follow:—Asa Butterfield, 79; W. C. Beschorman, 77; R. A. Matthews, 82; D. E. Jones, 88; J. A. Owens, 99; C. E. Ginn, 90; Walter Ogilvy, 96; R. A. White, 81; H. W. Mayorga, 83, and B. H. Roettker, 87. The next match will be played at the Western Hills Country Club, October 2.

WE OFFER

DRYERS
12—Vacuum Shelf Dryers, 27, 23 and 11
2—Bronze Vacuum Drum Dryers, Devine 40 in. x 80 in.
1—4 ft. x 30 ft American Process Rotary Dryer
1—4 ft. x 20 ft. Rotary Vacuum Dryer
2—5 ft. x 33 ft. Rotary Vacuum Dryers
1—4 ft. x 8 ft. Atmospheric Drum Dryer
1—4 ft. x 10 ft. Atmospheric Double Drum Dryer
5—Gordon Shelf Dryers

DISTILLING APPARATUS
1—12 in. Copper Column Unit
1—54 in. Copper Column Unit
5—Copper Vacuum Stills, 50, 75, 300 gallons
6—Aluminum Stills, 100 gallons

REFRIGERATING PLANTS
6—Brunswick & York, 2, 4, 6, 8 and 10 tons

FILTER PRESSES
9—Sweetland Nos. 12, 9, 7, 5, and 1
9—Kelly Nos. 850, 450, 250, and 150.
1—Oliver, all iron, 4 ft. x 6 ft.
1—Industrial, 6 ft. x 5 ft.
2—Oliver, 6 ft. x 6 ft.
3—42 in. x 42 in. Wood Filter Presses
3—30 in. x 30 in. Wood Filter Presses
2—24 in. x 24 in. Wood Filter Presses
1—12 in. x 12 in. Brass Filter Press
1—18 in. x 18 in. Brass Filter Press
10—18 in. x 18 in. Iron Filter Presses
2—24 in. x 24 in. Iron Filter Presses
1—36 in. Iron Filter Press
1—42 in. x 42 in. Iron Filter Press

CENTRIFUGALS
1—26 in. Copper Basket
2—36 in. Steel Basket
2—36 in. Bronze Basket
1—40 in. Copper Basket
1—42 in. Steel Basket
2—48 in. Copper Basket

KETTLES, JACKETED
50—80 gallon Aluminum
20—40 gallon Iron
15—60 gallon Iron
12—80 gallon Iron
6—100 gallon Iron
1—150 gallon Enameled, agitated
1—500 gallon Steel, agitated
3—800 gallon Cast Iron
2—1,200 gallon Sulphonator
1—1,600 gallon Nitrator

GRINDERS
1—No. 0000 Raymond Mill
1—30 in. Foos Attrition Mill

WERNER & PFLEIDERER MIXERS
7—Size XV., 100 gallons
2—Size XVII., 200 gallons
3—Size XVIII., 290 gallons

CONSOLIDATED PRODUCTS COMPANY INC.
15 Park Row, New York, N. Y.

LIQUIDATION SALE
Entire equipment of the
Indiana Dye & Chemical Co., Hammond, Ind.

STILLS
1—Buffalo steel horizontal vacuum still, 8 ft. x 10 ft., with receivers, condenser and vacuum pump.
2—Steel fractionating units, with 18 in. columns, complete.

REDUCER
1—Buffalo reducer, 6 ft. x 8 ft.

NITRATOR
1—Buffalo cast nitrator, 5 ft. x 6 ft., double agitator.

AUTOCLAVE
1—Buffalo, cast iron, jacketed, 75 gals.

STORAGE TANKS
3—10 ft. 6 in. x 18 ft., ¼ in. shell, 12,000 gals. closed.
2—6 ft. 2 in. x 12 ft. 4 in., ¼ in. shell, 2,500 gals., closed.
2—Lead lined, No. 10 lead, 5 ft. 6 in. x 9 ft., welded steel, cone bottom. Other tanks from 150 gals. up.

VACUUM PUMPS
1—Marsh, 8½ in. x 12 in., belt driven.
1—Marsh, 6 in. x 8 in., belt driven.

MISCELLANEOUS
Pumps, Air Compressors, gauges, scales, pipes, valves, fittings.

L. BRILL, Liquidating Agent
150th Street and Calumet Ave., Hammond, Ind.

GOOD USED MACHINERY FOR SALE

We DISMANTLE ENTIRE PLANTS, employing a gang of riggers and a fleet of trucks. Our large purchases and warehouse storage facilities enable us to give PROMPT SERVICE and ATTRACTIVE PRICES to our clients.

BOILERS

2—160-hp. Bridgeport Boilers complete with grates, fronts and fittings; butt-strapped.
1—150-hp. Dillon H.R.T. Boiler.
1—120-hp. Boiler; complete.
1— 50-hp. Vertical Boiler.
1— 20-hp. Vertical Boiler.
1— 7-hp. Vertical Boiler.

STILLS

1—150 gal. COPPER Still; Jacketed.
9—115 gal. ALUMINUM Jacketed Stills.
4— 80 gal. ALUMINUM Jacketed Stills.
6— 75 gal. ALUMINUM Jacketed Stills.
8— 80 gal. Cast Iron Jacketed Stills.

DRYERS

1—Devine Vacuum Dryer; 13 Shelves; double door.
2—Devine Vacuum Driers; 27 shelves.
2—Rotary Vacuum Driers; 32x8 in.
1—30-in. sq. Wooden Filter Press.

FILTERS

1—30-in. sq. C.I. Filter Press; 50 Chambers.
5—24-in. sq. C.I. Filter Presses.
1—18-in. sq. Wooden Filter Press.

AIR COMPRESSORS

1—American Air Compressor, 6x8 in.; belted.
1—Ingersoll-Rand; 4½x5, belted.
1—Portable Garage Air Compressor.
1—Clayton Compressor, 4¾x4¾.
3—Westinghouse, 8x8x10.
1—Westinghouse, 9½x13x10.

REFRIGERATION

1—20-ton REMINGTON Refrigeration Unit.
1—15-ton AUTOMATIC Refrigeration Unit.
1—10-ton MAYER Refrigeration Unit.
1— 8-ton BRUNSWICK Refrigeration Unit.
1— 4-ton YORKE Refrigeration Unit.
4— 2-ton BRUNSWICK Refrigeration Units.

CENTRIFUGALS

3—24-in. Troy Centrifugal Extractors.
1—30-in. Tolhurst Extractor; Copper Basket.
3—40-in. Tolhurst Suspended type.
6—40-in. Tolhurst Self-Balancing type.
1—44-in. Rubber Lined Extractor.

PUMPS

2—Worthington Duplex Pumps, 12x7x12.
Gardener Duplex Pump, 12x8x12.
Rumsey Triplex Pump, 3x4.
Bronze Centrifugal Pump.
C.I. Centrifugal Pumps.
Centrifugal Pump with motor, 5 in. Discharge.
Blaisdell Vacuum Pump, 14 in. x 10 in.; Belted.

MIXERS AND KETTLES

2—1000 gal. Steel Mixers, NEW.
1—1000 gal. C.I. Kettle, Jacketed.
12— 450 gal. DAY JUMBO Mixers.
1— 400 gal. Stokes Vacuum Mixer.
4— 300 gal. Sulphonators, NEW.
9— 300 gal. STOKES, Jacketed Mixers.
4— 150 gal. WERNER & PFLEIDERER Mixers, Jacketed, Agitators, Tilting Type.
1— 150 gal. DAY MIXER, tilting.
3—100 gal. Mixing Kettles.

MIXERS AND KETTLES (Continued)

9—Copper Jacketed Kettles, 120, 60, 40 and 25 gals.
90—ALUMINUM JACKETED KETTLES, 100, 80, 60 and 40 gal. capacities.
30—Jacketed DOPP Kettles, 100, 75, 60 and 40 gal. capacities.
12—40 gal. Jacketed MOTT Kettles.
1—40 gal. ENAMELED AUTOCLAVE with jacket and agitator, NEW.
2—Autoclaves, 25 and 50 gal.

MISCELLANEOUS

2—Jaw Crushers, 10 in. x 4 in.; Farrell Foundry make.
1—Jeffrey type "A" Crusher-Pulverizer.
2—Williams Crusher-Pulverizers.
1—Ball Mill 30 in. x 42 in.
2—Ball or Pebble Mills 24 in. x 16 in.
2—Ball or Pebble Mills 16 in. x 22 in.
2—Worthington Copper Tubular Condensers, 200 sq. ft. each.
26—500 gal. O.T. Steel Tanks, 5 ft. 6 in. dia. x 43 in. deep.
9—1700 gal. Steel Tanks, 8 ft. dia. x 6 ft.
3—2500 gal. Pfaudler Enameled Tanks.
1—3000 gal. Pfaudler Enameled Tank.
1—5000 gal. Pfaudler Enameled Tank.
9—3000 gal. Pressure Storage Tanks.
4—Hydraulic Presses, 24 in. square.
1—Hydraulic Press, 12 in. square.
3—Hydraulic Pumps.
12—10-hp. Motors, A.C. and D.C.
1—Ball & Jewel Rotary Cutter No. 2.
2000-ft. Lamson Roller Conveyors in 10 ft. lengths.
1—Sims Water Heater No. 4.

We are ALWAYS in the market for good used Machinery; either single MACHINES or ENTIRE PLANTS
Phones: 7707 and 7708 Waverly

MACHINERY & EQUIPMENT COMPANY, Inc.

Main Office and Warehouse:
225-231 Sherman Ave., Newark, N. J.

Branch Store Yards:
17-25 Clifton St. 211-215 Sherman Ave 22-30 Stanton St.

Business Opportunities

(Continued from page 85)

FOR SALE

3 new 2000 gal. closed jacketed Kettles with stirrers. 1—17 shelf Vacuum Dryer, shelves 59 in. x 78 in. 1—20 shelf and 1—17 shelf Vacuum Dryer, shelves 40 in. x 43 in. 1—3 ft. x 10 ft.—1—5 ft. x 25 ft. Rotary Vacuum Dryer. 1—6 ft. x 8 ft.—1—6 ft. x 5 ft.—1—5 ft. x 4 ft. Pebble mill. Address BOX 127, care of this paper.

200,000 air and moisture tight black impregnated pasteboard packing tubes, 3¼ in. diameter, 2½ in. high; also 200,000 2¼ in. diameter, 3¼ in. high, metal top and bottom; can be used for packing powders, dyes, chemicals, spices, colors, etc; $17½ per thousand f. o. b. Chicago. Acme Oil Corporation, 189 No. Clark St., Chicago, Ill.

For Sale or Lease—Factory, three story and basement, brick building; 5,000 sq. ft., location, Nyack-on-Hudson, N. Y.; shipping facilities, freight boat, two railroads, express and daily motor delivery; fully equipped for early occupancy, with steam boiler, engines, shafting, etc.; suited for any manufacturing business. Address Box 152, care of this paper.

About 5 tons Calcium Arsenate, on account of change in manufacture. Most of material still in original 200 lb. barrels. Desire offer f.o.b. warehouse, New York City. The Larvex Corporation, 250 W. 57th St., N. Y. City.

Very high grade French process for making Ionone, Geraniol and Citronellol as well as other kindred products. No agents nor amateur manufacturers. The information is the best. Address BOX 178, care of this paper.

Lot of Vertical Steel Closed Mixing Tanks, agitators, 800-1800 gallons; offered very low price for prompt removal, located Jersey City. Alberger Chemical Machinery Company, Inc., 103 Park avenue, New York, N. Y. Telephone Vanderbilt 2971.

Storage for gasoline or heavy oils up to 1,000,000 gallons, with ground area for expansion. Tide water and rail service. Vicinity of New York. Some buildings. Principals only. Address BOX 196, care of this paper.

FOR SALE

1 24-in. disintegrator; 1 16-in. Mead mill; 24 in. and 36 in. stone dry mills; 20 in. to 42 in. stone paint mills; stone and steel roller mills; 70 in. chaser; 72 in. chaser; shaking screens; 36 in. and 42 in. top run paste mills. P. F. Campbell, 55 Laurel St., Phila., Pa.

Factory at Elizabeth, N. J.—17 acres; 2 railroad sidings; 30,000 feet floor space; unstricted zone; good location for labor. Engines-Boilers-Equipment. Very cheap to any one who can use it. Complete details, R. L. Patterson, Sole Agent, 212 Broad St, Elizabeth, N. J.

Chemical factory making dye intermediates. Can be bought with lease or with real estate. Has private railroad siding and is in first-class operating condition. Address BOX 197, care of this paper.

One 12x30 Ross 3 steel roller mill; 5 J. H. Day 30-inch mills, with attached mixers; 1 100-gal. liquid interchangeable mixer; 1 gang 15-inch mills, 3 in a gang, with attached mixers; 2 80-gallon Kent White Lead Mixers, complete. Address BOX 202, care of this paper.

MISCELLANEOUS

Sales Representatives—Salesmen chemists acquainted with rubber, chemical, paper and paint manufacturing trades wish to act as sales representatives in metropolitan and Eastern districts for reliable producers of materials required in these lines. Address BOX 174, care of this paper.

If you manufacture products used in the paint, varnish, printing ink, paper rubber, soap or other industries, and which could be distributed in the State of Ohio, address BOX 179, care of this paper.

Wanted to sell in United States, materials of Merit, Domestic and Foreign, for further use in manufacturing by Paint and Allied Businesses. Sole representation desired which will be justified by receiving active and personal attention backed by many years of experience with such trades. Address BOX 137, care of this paper.

MISCELLANEOUS

We produce Bulk Paints, like Metallic Oxide, Graphite or Marine Black Paints; also Roofing Cements, Quick Drying Asphalt Paints, Waterproofing and Insulating Compounds. Our prices and facilities will interest large consumers, agents or jobbers, who can talk volume. Address Richmond Finishing Corp., 931 Pavonia Ave., Jersey City, N. J.

MANUFACTURING PLANT
NEW JERSEY

LOCATED 20 Miles, 38 minutes from New York City (Manhattan), 5 minutes' walk from station on excellent roadway. Plot 145x245 on grade. Buildings brick 60x70, four-story extension, one story 60x90, engine house 20x30, two-car garage, etc., 2 boilers, each 150 h. p. Corliss engine, 100 h. p., 90-foot stack, elevator 2,000 lbs. capacity. About 22,000 sq. ft., floor space. Things in good condition. Photo. this office. Possession October 1st. PRICE $26,000, terms to responsible buyer. No. 15762.

J. Sterling Drake, 74 Wall Street, New York.
Tel. 2959 Hanover

LIQUID and PLASTIC
Roof Cements
Highest Quality
ASPHALT

H. F. Myers Corporation
25 SPRUCE ST., NEW YORK
Factory—Lyndhurst, N. J.
Adequately equipped for quantity production

There is not a commercial center of any importance in any part of the World where the Oil, Paint and Drug Reporter does not circulate.

FOR SALE

Complete Equipment of
Baltimore Pearl Hominy Co.

DRYERS
2—3 ft. x 18 ft. Cutler Dryers
1—18 in. x 10 ft. Cutler Dryer
5—30 in. x 12 ft. Cutler Dryers
2—3 ft. x 12 ft. Hurn Dryers
1—No. 4 Adt Dryer
2—3 ft. x 18 ft. Adt Dryers
1—4 ft. x 34 ft. Adt Dryer

EVAPORATORS
1—Swenson Single Effect 60 in. x 60 in. x 11 ft., with condenser and pump
1—150 gallon Copper Vacuum Pan

FILTER PRESSES
1—18 in. x 18 in. Shriver, Wood
2—18 in. x 18 in. Sperry, Iron
2—24 in. x 24 in. Sperry & Shriver, Iron
1—30 in. x 30 in. Sperry, Iron
3—36 in. x 36 in. Shriver, Iron
1—No. 156 Kelley Filter
1—6 ft. x 12 ft. Oliver Filter
1—6 in. Sperry Laboratory Filter

OIL EXPELLERS
3—Anderson Oil Expellers

REFRIGERATING MACHINE
1—Frick 5 x 5 Duplex vertical, with complete ice making equipment

GLASS ENAMELED TANKS
1—Pfaudler closed 42 in. dia. x 6 ft. deep
1—Pfaudler, open, agitated, 54 in. dia. x 54 in. deep
1—Pfaudler, closed 60 ft. dia. x 6 ft. deep
5—Detroit 8 ft. dia. x 8 ft. deep, closed
4—Heiser 9 ft. 9 in. dia. x 8 ft. deep, open
1—Heiser 104 in. dia. x 4 ft. deep, closed

STORAGE and AIR TANKS
1—4 ft. dia. x 6 ft. deep, open
1—36 in. dia. x 4 ft. deep, closed
1—7 ft. dia. x 11 ft. deep, closed cone bottom
1—23 in. dia. x 6 ft. closed
1—29 in. dia. x 6 ft., closed
1—4 ft. dia. x 12 ft., closed
1—42 in. dia. x 20 ft., closed
2—Rectangular 3 ft. x 4 ft. x 8 ft.
1—Rectangular 6 ft. x 10 ft. x 10 ft.
1—Digester or cooking tank 7 ft. x 15 ft., with steam coils and horizontal agitator
1—50 gallon steam Jacketed Kettle

AIR COMPRESSOR
1—Ingersoll-Rand 14 x 12

GRINDERS
8—24 in. Monarch Attrition Mills

SIFTERS
20—Bolting Reels, silk cloth and steel screens
6—Vibrating type sifters

PUMPS
1—Worthington 4½ x 2¾ x 4
2—Worthington 6 x 4 x 6
2—Fairbanks 7 x 4½ x 7

Many other items at attractive prices.

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Foot of South Howard St. Baltimore, Md.

STEEL DRUM BARGAINS

500 new 110 gallon drums, $7.50.
500 one time shippers, $2.25. Last contents lubricating oil.
All types in stock at Newark, N. J

RALPH L. CROSTHWAITE COMPANY, Inc. Cortlandt 5750 **30 Church St., NEW YORK CITY**

Classified Business Opportunities

Minimum rate (48 words), without display, $2.00 per insertion; 25c. for each additional six words.

WANTED

Filter Presses, 24 in. to 36 in. sq.; Three Storage Tanks, 6,000 to 10,000 gals. capacity; Jacketed Kettles, 400 to 600 gals.; Two W. & P. Mixers. Address BOX 833, care of this paper.

Color manufacturer—experience absolutely essential in the manufacture of pulp and coating colors as well as ability to handle men; excellent opportunity. State previous experience and salary desired. Address BOX 144, care of this paper.

Surplus and abandoned stocks of chemicals, dry colors, drugs, waxes, glues, gums or allied products bought outright for cash; opportunity for you to dispose of dead stock. Address BOX 151, care of this paper.

Two Hundred (200) to Three Hundred (300) tons pink and green Abalone shells ungraded. Twenty Five Dollars ($25.00) per short ton F. A. S. San Pedro, sacked September. November delivery fifty tons (50) every two weeks. Address BOX 157, care of this paper.

A man with experience to take charge of selling, through office correspondence, foreign and domestic crude drugs in a large way. No traveling. J. L. Hopkins & Company, 100 William Street, New York.

Laboratory Dyer: Young man with good education and experience in matching textile and leather dyeings and standardizing dyestuffs in laboratory of large color house. Good opportunity and future if conscientious and capable. State training, salary, religion and references. Address BOX 170, care of this paper.

Hunter's Lightning Sifter and Mixer D8 or D10 Models, 800 to 1,000 pounds capacity. Also Day Lightning Packer, wood or steel frame; good condition. Address BOX 171, care of this paper.

We wish to engage a man, preferably not over 40 years of age, to take charge of promotion of sales, including the handling of salesmen and advertising. Have been manufacturing about 20 years complete high grade line of paints and specialties and jobbing paint sundries to dealers and industrial trade. Have well established business. A splendid opportunity for a man with ability and energy. Must give references from last employer and give clear account of past record. Correspondence confidential. Tell us all about yourself in first letter. Dozier & Gay Paint Co., Jacksonville, Fla.

Dry Color Mixer, 1,500 to 2,000 pounds capacity. Address with full particulars. Address BOX 172, care of this paper.

By reputable company in Western Pennsylvania, a competent Paint and Varnish Chemist; state experience, age and salary. Address BOX 173, care of this paper.

De Laval Centrifugal Machine. State price and where same can be seen. Write 1915 Dukeland avenue, Baltimore, Md.

Varnish Salesman to sell manufacturing trade in Metropolitan District, including Greater New York and New Jersey. State experience, age and salary expected. Address BOX 180, care of this paper.

Brooklyn soap manufacturer, fully equipped plant for automobile, U. S. P. green, shampoo base, toilet and floating soaps, seeks salesman with large following or partner. Not much capital required. Address BOX 176, care of this paper.

Salesman for New England territory by manufacturer of industrial varnishes, baking Japans, and grinding liquids. A real opportunity for an experienced man to make a life connection with a progressive and liberal house whose reputation for making a good competitive line is generally conceded. The man we want must be not only ambitious but an untiring worker. Replies will be treated in absolute confidence, and these to merit proper consideration must be explicit in details concerning present or last employment, kind of goods sold and class of trade covered. Address BOX 181, care of this paper.

Buyer for raw and packing materials for large soap factory located near New York city. Must be thoroughly experienced and well acquainted with fat and oil markets and sources of supply. Replies will be treated strictly confidentially and must give full particulars of experience and salary desired. Address BOX 190, care of this paper.

WANTED

High Class salesman for introducing new brand of imported sulphonated acid specially treated oils for the leather and textile trade. Address BOX 189, care of this paper.

Firm starting an entirely new line can use the services of a man experienced in color matching of paints and varnishes. Position with excellent future for successful applicant. Address BOX 191, care of this paper.

Experienced Paint Salesman with following wanted to represent Paint House carrying complete line of Enamels, Flats, Ready-Mixed Paints, Colors in Oil and Varnishes. Only live wires with pep apply. Wonderful opportunity for the right kind of men. Liberal drawing against commission. Address BOX 193, care of this paper.

200 10 to 12-gallon glass carboys. Second hand. Stahl type or similar. Supported in wooden boxes. Grass-packed cannot be used. State lowest price. Address BOX 199, care of this paper.

Wanted Cod Oil in barrels, immediate shipments; also future shipments. Address BOX 200, care of this paper.

Attractive and permanent position open to Salesman, thoroughly qualified, to sell Disinfectants. Acquaintance with trade and unquestioned credentials essential. The Abbott Laboratories, 31 East 17th St., New York, N. Y.

POSITIONS WANTED

Chemist, twenty years' experience manufacturing line. Specialty dyestuffs, intermediates, sulphur colors, azo colors, direct and chrome (blacks), hydrogen peroxide, barium binoxide and good line of pigments. Capable manager of plants and research laboratory. Wants connection. Address Pigments, BOX 135, care of this paper.

Salesman, selling to oil jobbers and refiners throughout United States, would like to connect with some large manufacturers of auto soaps, greases and sulphonated oils, who would also be willing to make up certain specialties according to my formulas. I can do a large business. I understand the manufacturing and can manage salesmen. I would sell on percentage basis. Address BOX 167, care of this paper.

Paint superintendent with practical knowledge of all lines of paint and enamel manufacturing will be open for a position in the near future. Would like to get in touch with some paint manufacturer who has an opening for such a man. Address BOX 168, care of this paper.

Baltimore or vicinity—technical position in chemical or allied industry wanted by graduate chemical engineer with eight years' experience in research, experimental and large-scale development of organic and inorganic processes. Specialist in plant design, construction, improvement, maintenance and operation. Address Box 169, care of this paper.

Capable salesman, familiar with several lines covered by this paper, seeks change. Present sales run $300,000 per year. Knows furniture manufacturing and paint jobbing trade, particularly in South. Now located New York City. Address BOX 175, care of this paper.

Graduate chemist, having 8 years' experience, desires to relocate with chemical manufacturer or allied industry. Has successively filled positions of control chemist, chief chemist, production chemist, experimental engineer, manager of small plant. Interested only in something permanent, being married and having a family. His criterion of position is its future promise and responsibility. Can make readjustment within reasonably short period. Address BOX 177, care of this paper.

Paint and enamel maker understanding all phases of industry wishes to make a change; East preferred. Address J. A. G., BOX 179, care of this paper.

Chemical engineer, Columbia graduate, six-year course. Four year's experience in research, development and plant operation on rubber accelerators (thiocarbanilide, diphenylguanidine, triphenylguanidine, aniline sulphate), catalytic processes (phthalic anhydride, malic acid, anthraquinone), also metatoluylenediamine, phthalimid, aniline salt, aniline, nitrobenzene, dinitrotoluene and sodium bi-sulphite. Address BOX 185, care of this paper.

POSITIONS WANTED

Pharmaceutical chemist desires position with a pharmaceutical manufacturing concern. Have had much training in pharmacy and chemistry and broad experience in pharmaceutical manufacturing, assaying, control work and formula development. Details gladly furnished upon request. Satisfactory reference guaranteed. Address BOX 182, care of this paper.

Intermediates and Dyes—Consulting Chemical Engineer of German University education, with many years' practical research and plant experience, desires temporary or permanent work with American company manufacturing dyes and intermediates. Knowledge of the latest processes in sulphur and azo dyes, naphthylene derivatives and other intermediates. Address BOX 183, care of this paper.

Chemical engineer and research chemist, German University training, with wide and practical experience in research and plant managing, familiar with the refining of alkaline and metallic minerals and the manufacture of inorganic, heavy and fine chemicals and acids, synthetic compounds, pharmaceuticals, dyes and intermediates, wishes to connect with factory where a conscientious and successful worker is given a chance to obtain life position. Address BOX 184, care of this paper.

Chemist, B. S., five years' experience in the azo dye industry as control chemist and on development work, some experience with B Naphthol, desires position in or around New York or Newark, N. J. Salary $150 per month. Address BOX 186, care of this paper.

Business Chemist, Cornell graduate, with executive sales and manufacturing experience in industrial chemicals, oils and dyestuffs for textile, leather and paper industries desires position of responsibility. Has valuable commercial processes and following among mills. Can commercialize results of research. Address BOX 192, care of this paper.

Chemist, M. I. T. graduate, and now employed by large varnish company, desires to locate with company in Massachusetts, close to Boston. Other openings considered. Has thorough technical training and experience in the production, developing, and testing of baking and air-drying varnishes. Address BOX 194, care of this paper.

Paint and Varnish Chemist. Experienced in analysis of all raw materials used in paints, oils, varnishes, mixed paints, formulating, duplication, research work, purchasing, assisting sales, etc. Single, age 25. Am willing to locate anywhere. Good references. Address BOX 198, care of this paper.

Chemist, college graduate, eight years' experience in the manufacture of dyes and intermediates. Good laboratory and plant man. Would like to connect with a reliable concern. Address BOX 195, care of this paper.

Varnish maker. Twelve years' experience in formulating, manufacturing and testing; knowledge of all lines. Desires to stay in New York or vicinity. Address BOX 201, care of this paper.

For Sale—Only to A1 organization. Services of an experienced chemical salesman and trader, either in sales or purchasing department; technical education, first class references. Suitable connection more important than remuneration. Address BOX 203, care of this paper.

Man—College Graduate in Chemistry—Has had 3 years' experience as a junior executive with one of the largest manufacturers in this country; desires position of similar nature in New York or vicinity. Available on short notice. Address BOX 204, care of this paper.

FOR SALE

Linoleates—Cobalt, manganese, lead, magnesium. True linoleates made from pure linseed oil only. Completely dehydrated. "Every pound the same." Made and sold by the Pantasote Leather Co., Passaic, N. J.

Four Hydraulic Presses; Two Jeffrey Crushers; Stokes & W. & P. Mixers; Six Centrifugal Extractors; Twelve Aluminum and Copper Stills and Kettles. Machinery & Equipment Co., 225 Sherman Ave., Newark, N. J. Phone 7707 Waverly.

Cylinders—Drawn steel body, welded bottom, length 51½" to valve base; diam. 5½"; weight 62 lbs.; brass oxygen valve; 600 in good condition; very cheap. H. K. Fort, 2227 N. American St., Phila., Pa.

Used Chemical Equipment—70 feet 1½ in. Durion Pipe with flanges; three 4 in. Durion Plug Cocks; 21—3 in. Durion Plug Cocks; 15—1½ in. Durion Plug Cocks; 20—1 in Durion Plug Cocks; several extra Plugs and Wrenches; several Durion Elbows, Tee, etc.; 1—8 in. Durion Blower; 2 Durion Centrifugal Pumps, No. 102, Belt driven and mounted on cast iron base; 2 in. suction, 1½ in. discharge; 3 Durion Agitator Paddles, 4 ft. high with 4 3 in. arms; 1 No. 31 American Blower; 1 Bay City Iron Company Sulphur Burner, 20 in. cylinder; 1 Johnson Wood Filter Press, frames 25 in. x 33 in. with 24 hollow frames; 1 Johnson Metal Filter Press, frames 18 in. x 18 in., with 37 hollow frames and gates; 2 Horizontal Air Compressors; 2 Tolhurst "Self balancing" Centrifugals, 40 in. iron baskets; several extra baskets and sides; 1—1600 gallon Buflokast Reducers; 1—800 gallon Buflokast Nitrator. All of the above items are complete and in excellent condition, some of them having never been used. Lansing Paint & Color Co., Lansing, Mich.

Schaum & Uhlinger Centrifugal Extractor, 44 in. copper basket, equipped for electric and steam drive, in excellent condition; bargain. The Synthetic Products Co., Merwin & Center Sts., Cleveland, O.

Belt driven ice machine; 1 35-ton De La Vergne ice compressor; 7 ton can plant; high side and 75 H. P. motor; $4,000 on cars Buffalo. 1 30 ton York upright duplex compressor with Corliss engine, $1,000. 1 35-ton, same style as above, $1,200. 200 ice cans, 41-inch by 10 inch by 20 inch, $1 each. Charles S. Jacobowitz, 1382 Niagara St., Buffalo, N. Y.

(Continued on page 84)

TANK CARS FOR ALL PURPOSES

Bought, Sold, Leased or Exchanged.
Fair Prices—Reliable Service.
TANKS OF ALL KINDS

SHIPPERS' CAR LINE, Inc
165 Broadway, New York City

DRUMS FOR SALE

200 — 110 GALLONS — BLACK IRON

Steamed Clean - Tested - Painted - Guaranteed not to Leak

$4.00 EACH, F.O.B. CARS PERTH AMBOY

GLUCK STEEL BARREL COMPANY
PERTH AMBOY . . . NEW JERSEY

Coal Tar Products

(Continued from page 74)

however, at former prices and consumers did not seem to be in any particular rush to stock up, to judge by the slow way in which buying progressed. Quotations were from 60c. to 80c. per pound for the crude, depending on the quantity, and from 65c. to 90c. for the refined.

ALPHA-NAPHTHYLAMINE. — Makers maintained prices in spite of the extreme dulness which characterized the market. Stocks were in generous volume, but demand not only from foreign sources, but from domestic as well has almost disappeared. The range was from 35c. to 37c. per pound, and lower priced resale material which was in evidence a few weeks back has completely disappeared.

ANILINE OIL.—Demand was better and the market steadier in tone. Prices were well maintained on the basis of 16c. per pound at works in tanks, and up to 17c. in drums. Inquiry has shown much gain and small orders were in great volume than previously. The surplus stocks in this market have been satisfactorily cleaned up and the market was in better shape than for some time back. The oil for red was quoted at 40c. to 45c.

ANILINE SALT. — Demand was along steady lines and stocks were none too generous. Quotations ranged from 24c. to 26c. per pound for prime salt from makers. Less resale salt has been noted and it was difficult to locate at low prices or formerly. Most resale salt was far from prime also, and the 22c. prices had little meaning.

BENZALDEHYDE.—It is expected there will be a new factor in this material within the course of the next few weeks. Plans are afoot to market considerable quantity from this source, which should be available by the middle of next month. As it was, the leading maker at tne moment was still out of the market, and had only the U.S.P. and the F.F.C. grades to offer. The technical was available from other sources in some volume, but not for delivery under two weeks, and was priced 75c. to 80c. per pound. The F.F.C. was $1.75 to $1.85, and the U.S.P. was $1.50 to $1.60.

BENZIDENE.—Base was quoted at 80c. to 84c. per pound, and demand was along good lines. The market has been fairly active all along, but latterly a decided improvement could be seen. The sulphate was neglected and not plentiful, the price from 75c. to 80c.

BENZYL CHLORIDE.—Supplies of this intermediate were now to be had in good volume from one maker, who had sufficient stocks on hand to take care of all the domestic demand that might arise. Quotations were not so high as formerly either, being 40c. per pound for the refined, and 35c. for the crude. The maker who recently withdrew has not yet entered the market again, and indications were that he would be absent for some time, if he ever came back.

BETA-NAPHTHOL.—Technical was steadier at 22c. to 23c. per pound from first hands, and 21c. for dealers. Resale material has been gradually eliminated and consequently that section of the market has strengthened up a bit. Makers had plenty on hand but were finding a readier outlet for it at their prices than formerly. The sublimed was 55c. to 60c.

ETHYL-BENZYL-ANILINE. — Trading was along steady if somewhat restricted lines and the prices held at former levels of $1.25 to $1.45 per pound. Stocks were narrowly distributed at best and few engaged in production.

ETHYL BROMIDE.—Technical was hardly moving, with stocks in some volume and first hands asking 40c. to 42c. per pound for their holdings. None has been offered in the second hand market.

META-NITRO-ANILINE. — Prices were maintained at 72c. to 75c. per pound, at which levels some small business was reported. The market was inactive on the whole, and presented little change from the previous week.

META-NITRO-PARA-TOLUIDINE. —Moderate stocks were available, and demand was not very large, but the tone was distinctly firm in view of developments in closely related materials. The range was $2.25 to $2.30 per pound.

MIXED TOLUIDINES. — Did not seem to be very plentiful, due to the difficulty that has been experienced in getting supplies of raw materials. Demand has been fairly consistent, but was of routine nature. Prices were steady at 37c. to 40c. per pound.

NITRO-BENZENE. — Irregular but sometimes very good buying of this intermediate was noted. Interest was mostly in refined grades. Quotations were from 10c. to 12c. per pound, with 9½c. possible on the right sort of business. These were works prices.

ORTHO-TOLUIDINE. — The price was now 18c. to 20c. per pound and firm at that. That was the highest in some months, and was due to the scarcity which has developed. Inquiries were numerous but actual buying was poor.

PARA-TOLUIDINE.—Was advanced to 95c. to $1 per pound. Stocks were small, the selling price has been too low in the past to allow of any profit, and demand has jumped.

SODIUM NAPHTHIONATE. — Was reduced somewhat due to the dullness and desire of factors to move stocks. Quotations were on a basis of 60c. to 65c. per pound.

Miscellaneous Oils

(Continued from page 49)

market remained in the same steady position it has occupied for some time past. Natural was quoted at 86c. to 91c. per gallon, and bleached from 89c. to 94c. f.o.b. New Bedford in barrels.

WHALE.—There was an absence of new developments of importance. Consumers of refined showed little disposition to purchase ahead to any extent, but there was a fair inquiry and the market remained steady at 75c. to 79c. per gallon for natural, 78c. to 81c. for bleached, and 81c. to 83c. for extra bleached. There was a steady movement of crude on contracts.

Chicago

CHICAGO, Sept. 12, 1923.

The demand for menhaden has been largely supplied through contracts made at around 40c., and while there is still some business offered it is at prices below the present views of producers, who are now asking 45c. for crude at the producing ports and 55c. to 60c. for light pressed at Eastern shipping points. The market for Coast fish oils is too high for business right now and yearly supplies have been taken off the market by contract owners.

London

Following were the quotations on sperm oil in London for the week:—

	Ton.
Saturday	£30
Monday	30
Tuesday	30
Wednesday	30
Thursday	30
Friday	30

Seattle

SEATTLE, Wash., Sept. 8, 1923.

Fish oils supplied all of the trading, which was developed here during the past week, and there was no outstanding total to these to form a trade feature. Salmon and Alaska herring oils moved in average-sized lots and there were small sales on domestic sardine, but all of these showed an upward tendency on prices and holders' ideas are all firm. The Oriental fish oils registered an advance also, partly sympathetic, but chiefly because traders are convinced that the market and production there is going to be disturbed for some time to come. Users of fish oils are showing more interest in the deal at present, as indicated by the narrowing differential between their bids and the held prices on the comparatively small stocks of Coast oil which are unsold. Most of the week's sales were made at the upper end of the quoted ranges on the respective offerings. Closing asked prices for the week were as follows:—Salmon oil, No. 3, 45c.; sperm oil, No. 1, 40@45c. nominal; sperm oil, No. 2, 30c. nominal; sperm oil, No. 3, 27½c. to 30c. nominal; sperm oil, No. 4, 30c. nominal; whale oil, No. 1, 45c. nominal; whale oil, No. 2, 42½c. nominal; whale oil, No. 3, 40c.; whale oil, No. 4, 30c.; domestic herring oil, No. 1, 42½c. to 45c.; Oriental herring oil, No. 3, 40c.; domestic sardine oil, No. 1, 42½c. to 45c.; Oriental sardine oil, No. 3, 40c.; dogfish liver oil, No. 1, 37½c. to 40c.; dogfish liver and body oil, No. 1, 37½c.

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Alphabetical Index to Advertisements

Alexander, Jerome 14
Ambruster, Howard W 14
American Asphalt Assn..... 31
American Camphor Refining Co.... 59
American Can Co..... 15
American Car & Foundry Co..... 75
American Cyanamid Co..... 47
American Distilling Co..... 7
American Dyewood Co..... —
American House Wrecking Co..... 83
American Kreuger & Toll Corpn... —
American Linseed Co..... 34
American Schaeffer & Budenberg Corpn. ..... —
American Tripoli Co..... 80
American Trona Corp..... 54
American Zinc Sales Co. 60
Anaconda Lead Prod. Co..... 22
Anderson Co., The V. D. 36
Antwerp Naval Stores Co..... 31
Arner Co..... 56
Arnold, Hoffman & Co., Inc..... 71
Asia Drug Co..... 52

Bacon, Dr. R. F..... 14
Baird & McGuire, Inc..... 73
Baker & Bros., H. J. ..... —
Balbach Smelting & Refining Co.... 80
Balfour, Williamson & Co..... 39
Barber Asphalt Co., The..... —
Barber Co., W. H..... 88
Barrett Co., The.....46, 73
Barrett Co., The.....46, 72.73
Battelle & Renwick..... 46
Beggs Bros., Inc..... 88
Belgian Trading Co., Inc..... —
Benedict Laboratories, The..... 14
Benkert & Co., Inc., W..... —
Berg Industrial Alcohol Co., David 1
Binney & Smith Co..... 24
Blagden & Co., Victor..... 74
Borne, Scrymser Co.....44C
Bradley, A. J..... 83
Breon & Co., Geo. A..... —
Brewer & Co., Inc. 37, 59
Bridgette, R. E..... 60
Brill, L. 83
Brocalsa Chemical Co..... 53
Brode Corp., F. W..... 35
Brown & Co., Ltd., Arthur..... 39
Brown, Edwards Co..... 37
Brown Petroleum Co., R. J..... —
Buffalo Foundry & Machine Co..... 66
Bull & Roberts 14
Bullock & Sons, Inc., E. L..... 27
Bureau of Chemistry..... 14
Bush & Co., W. J. 57

Cabot, Inc., Godfrey L..... 24
Cadwallader & Co., Inc. 26
Calco Chemical Co..... 9
Campbell, P. F..... —
Canfield Oil Co., The..... 41
Carbide & Carbon Chemicals Corpn. —
Celite Products Co. 60
Chadeloid Chemical Co..... 29
Chance & Hunt, Ltd..... 69
Chatfield Mfg. Co..... 74
Chemical Products Corp..... 73
Chess & Wymond 74
Chicago Copper & Chemical Co.... 63
Chiris Co., Antoine..... 57
Chisos Mining Co., The..... 52
Church & Dwight Co. 66
Cleveland-Cliffs Iron Co., The..... 1
Cleveland Cooperage Co.....44E
Colgnet Chemical Products Co., The 58
Colgate & Co..... 53
Colledge, E. W..... 31
Colton Co., Arthur..... 32
Consolidated Products Co., Inc.... 83
Continental Can Co., Inc..... 26
Continental Whiting Co..... 60
Cooper & Co., Charles..... —
Cooper & Cooper, Inc..... 62
Corona Chemical Co., Inc..... 53
Cosden & Co..... 43
Cosmos Carbon Co..... 24
Cowing Laboratories 14
Cox, Aspden & Fletcher 58
Crosthwaite Co., Inc., R. L..... 84

Darco Sales Corporation..... 67
Daugherty & Son, W. H..... 88
Day & Co., The J. H..... —
Dehls & Stein..... 74
Dekker, Jan..... 27
DeLore Co., C. P..... 23
Delta Chemical & Iron Co..... 88
Devine Co., J. P.....44C
Diamond Alkali Co..... 65
Dickinson & Co., J. Q..... 56
Digestive Ferments Co..... 56
Dow Chemical Co..... 70
Drake, J. Sterling..... 85
Drakenfield & Co., B. F..... 71
Draper Manufacturing Co., The.... 88
Dreyer, P. R..... 52
Du Pont de Nemours & Co., Inc., E. I..... 28

Eagle-Picher Lead Co., The..... 30
Eimer & Amend..... —
Ekroth Laboratories 14
Elbert & Co., Inc..... 37
Eldred & Atkinson, Inc..... 14
Ellis Foster Co..... 14
Emerman & Baumoehl, Inc..... 59
Emery Candle Co..... 38
Emery Manufacturing Co.....44C
Erie Steel Barrel Co..... 59
Erkenbrach & Co., Geo. A..... 70
Evans Lead Co. 60

Fairlie, A. M..... 14
Falk Co., Inc..... 38
Federal Chemical Co. of Nitro..... —
Federal Phosphorus Co..... 10
Federal Products Co..... 52
Ferd'nand & Co., L. W. ..... —
Fergusson, Alex. C., Jr. 70
Fergusson Bros..... 63
Fezandie & Sperrle..... —
Fougera & Co., Inc..... —
Francesconi & Co., J. C..... 37
Frank-Vliet Co., Inc..... 59
Franks Chemical Products Co..... 70
French & Co., Samuel H..... 27
Fritzsche Bros., Inc..... 57

Gair & Co., Robert..... —
Garrigue & Co., Inc., Wm..... 14
General American Tank Car Corpn. 44
General Chemical Co..... 67
General Naval Stores Co..... 31
Giese & Son, August..... 71
Ginsberg, Ismar B. Sc..... 14
Gluck Steel Barrel Co..... 85
Golwynne, Henry A..... 56
Goodrich, William O..... 33
Grasselli Chemical Co., The..... —
Gray Industrial Laboratories..... 14
Gray & Co., William S..... 1
Greeff & Co., Inc., R. W..... 16
Gross & Co., A..... 38
Grunenberg, Dr. H..... 14
Gulf Refining Co.....44B

Hardy & Ruperti, Inc., Chas..... 62
Harshaw, Fuller & Goodwin Co..16, 53
Heekin Can Co..... —
Heller & Merz Co., The..... 16
Henderson, R. R..... 14
Hercules Powder Co..... —
Herman Chemical Co..... 52
Herrmann Co., Morris..... 25
Heyden Chemical Co. of America, Inc. 86
Hill's Son & Co., Edward..... 66
Hochstadter Laboratories..... 14
Hollingsworth & Peterson 66
Hopkins & Co., J. L..... 55
Hoshi Pharmaceutical Co., Ltd..... —
Hottmann Machine Co., The..... —
Huber, J. M..... 24
Hunt Co., Robert W..... 14
Hunt Manufacturing Co., The..... 73
Hurst & Co., Inc., Adolphe..... 26
Hutchinson & Co., Inc., D. W..... 57
Hymes Bros. Co..... 58

Imperial Color Works, Inc..... 25
Industrial Chemical Co..... 11
Industrial Chemical Laboratories.. 14
Innes & Co., Inc..... —
Innis, Speiden & Co., Inc..... 80
Insurance Co. of North America.... —
Irvington Smelting & Refining Co.. 80
Island Petroleum Co..... 43

Jackson & Co., Ellis 48
Jacoby, Henry E..... 14
Jayne & Sidebottom, Inc..... 74
Jefferson Distilling & Denaturing Co. 1
J. H. R. Products Co..... 69
Jordan Coal Tar Products Co., Inc.. —

Kaffee Hag Corpn..... —
Kalbfleisch Corpn..... 66
Kazanjian, Inc., Bedros..... 59
Keery Co., Inc., Thomas..... 52
Kellogg & Sons, Inc., Spencer..... 33
Kelloggs & Miller..... 33
Kem Service Laboratories, Inc..... 14
Kent Machine Works..... 32
Kentucky Color & Chemical Co., Inc. 26
Kentucky Distilleries & Warehouse Co..... 52
Keystone Minerals Co..... 24
Kiefer, K. H..... 14
Kittredge & Co., R. J..... 32
Klipstein & Co., A..... —
Knight, Maurice A..... 11
Kobold Corp., The..... 14
Krebs Pigment & Chem. Co., The.. 23
Kuttroff, Pickhardt & Co., Inc..... 48

Laning, E. M..... 14
Lathrop & Co., Inc., H. R..... 55
Lehn & Fink, Inc..... 1
Lewis, John D..... 77
Lilly & Co., Eli..... 54
Lindsay Light Co..... 70
Littleford Bros. ..... —
Lueders Co., George..... 57
Lusskin & Co., Inc., A..... 60

Maas, Arthur R..... 14
Machinery & Equipment Co., Inc... 84
Magnus, Mabee & Reynard..... 58
Major & Co., Ltd..... 74
Mallinckrodt Chemical Works..... 88
Mantius, Otto..... 14
Mantrose Corp..... 59
Martin Co., The L..... 24
Marx & Rawolle, Inc..... 53
McCormick & Co., Inc..... 55
McDonagh & Sons, Wm..... 32
McKenna, Dr. Charles F..... 14
McMichael, Paul..... 14
Meade-King, Robinson & Co., Ltd.. 38
Mechling Bros. Chemical Co..... —
Merck & Co..... 69
Merrimac Chemical Co..... 71
Metasap Chemical Co. ..... —
Meteor Products Co., Inc..... 74
Metz & Co., Inc., H. A..... 77
Meurer Steel Barrel Co., The..... 88
Meyer, Martin..... 14
Miller's Sons Co., A. D.....44C
Millring, E. Ross..... 14
Miner-Edgar Co..... 88
Miner Laboratories..... 71
Mitchell-Rand Mfg. Co..... 38
Monmouth Chemical Works..... —
Monsanto Chemical Works.....50, 73
Morana, Inc..... 57
Mutual Chemical Co. of America.... 76
Myers Corp. H. F..... 84

National Aniline & Chem. Co., Inc.. —
National Lead Co..... 12
National Milk Sugar Co..... 56
National Pigments & Chemical Co.. —
National Rosin Oil & Size Co..... 32
National Transit P. & M. Co..... 41
Natural Products Refining Co..... 86
Naugatuck Chemical Co..... 63
New England Fuel & Trans. Co..... 46
New Jersey Zinc Co..... —
New York Color & Chem. Co., Inc.. 72
New York Testing Laboratories.... 14
Niagara Alkali Co..... 69
Nicholas & Co., J. H..... —
Nichols Copper Co..... 80
Nickells-Rowland Co., Inc..... 55
North Star Chemical Works, Inc... 37
Northwestern Chemical Co..... 58
Norwegian Nitrogen Prod. Co., Inc.. 46
Norwich Pharmacal Co..... 56
Nulomoline Co..... —

Oat & Sons, Joseph..... 35
Oil States Petroleum Co..... 59
Old Hickory Powder Plant..... 70
Orbis Products Trading Co..... 58
Organic Laboratories..... 14
Osborn Co., C. J..... 24

Pacific Coast Borax Co..... 54
Parke, Davis & Co..... —
Paterson, Boardman & Knapp..... 88
Pease Laboratories, Inc..... 14
Pennsylvania Salt Mfg. Co..... 69
Pennsylvania Tank Car Co., The... 43
Perry & Webster, Inc..... 27
Perth Amboy Chemical Works.... 54
Petroleum Iron Works.....44B
Pfaltz & Bauer, Inc..... 68
Pfizer & Co., Inc., Chas..... 56
Pittsburg Can Co. ..... —
Pittsburgh Plate Glass Co..... 29
Powers - Weightman - Rosengarten Co. 51
Presman Co., B..... 56
Procter & Gamble Co., The.....35, 53
Proctor & Schwartz, Inc..... 70
Publicker Commercial Alcohol Co.. 1

Ransom Co., L. E..... 77
Raymond Bros. Impact Pulverizer Co.....44D
Republic Steel Package Co., The... —
Rock Products Co..... 27
Rogers-Pyatt Shellac Co..... 59
Rub-No-More Co..... 38

Sadtler & Son, Inc., Samuel P..... 14
Salts & Chemicals, Ltd..... 70
Save the Surface Campaign..... —
Scheel, William H..... 59
Schieffelin & Co..... 55
Schwarz Laboratories..... 14
Seaboard Chemical Co..... 51
Seaver & Co..... 24
Sell, Putt & Rusby, Inc..... 14
Semet-Solvay Co..... 70
Sergeant & Co., E. M.....63, 70
Shaw & Co., John..... 78
Shippers Car Line, Inc..... 85
Shriver & Co., T., The..... 36
Sieck & Drucker..... 14
Siemon & Elting..... 24
Sinclair Refining Co..... 40
Sino Java Handelsvereeniging, Inc. 29
Smitn & Co., J. Lee..... 23
Societe Commerciale des Potasses d'Alsace..... 71
Solvay Process Co..... 64
Sonneborn Sons, L. ..... —
Southern Acid & Sulphur Co..... 46
Southern Dyestuffs Co..... —
Speiden-Whitfield Co., Inc. 60
Sperry & Co., D. R..... 35
Standard Oil Co. of N. Y..... 42
Standard Ultramarine Co., The..... 26
Star Clay Co. 60
Stearine Candle Works..... —
Stillwell & Gladding..... 14
Stillwell Laboratories, The..... 14
Stoll Co., The J. H..... —
Sun Chemical & Color Co..... 27
Suter & Co., Inc., Eugene..... 62
Sutton, Frank..... 14

Taintor Co., The 60
Tamms Silica Co..... 26
Technical Economist Corp..... —
Tennant Sons & Co., C..... —
Thibaut & Walker Co., The..... 27
Thorkildsen Mather Co..... 54
Thurston & Braidich..... 59
Tidewater Chemical Co. 60
Todd Co., A. M..... —
Toledo Seed & Oil Co..... 51
Townsend, Inc., Chas..... 58
Trageser, John, Steam Copper Wks. 31
Trilling Co., H..... 32
Turner & Co., Joseph..... 63

Ultramarine Co., The..... 26
Union Creosote & Oil Co., Inc..... 73
Union Sulphur Co..... 48
United Color & Pigment Co..... 27
United States Industrial Alcohol Co. 1
Utah Gilsonite Co..... —
Utility Color & Chemical Co..... 26

"Veemesta" Nammlooze Vennootschap..... 32
Victor Chemical Works..... 71
Vietor & Hosken..... 52
Virginia Smelting Co. 66
Vorce, L. D..... 14
Vulcan Oil Refining Co..... 41

Waddell & Co., R. J..... 29
Waldo, Inc., E. M. & F..... —
Waterville Foundry & Mfg. Co..... —
Waugh & Co., Walter..... 77
Weiss & Downs..... 14
Welch, Holme & Clark Co..... 57
Wells, Raymond..... 14
Westmoreland Chemical & Color Co., The..... 26
Wheeling Steel Corp..... 32
White Co., T. & S. C..... 46
Whiting, J. L.—J. J. Adams Co..... 29
Wiarda & Co., Inc., John C 63
Wilckes, Martin Wilckes Co....24, 71
Wiley & Co..... 14
Will & Baumer Candle Co., Inc..... 38
Williams & Co., C. K..... 26
Wilson & Bennett Mfg. Co..... —
Wilson Laboratories, The..... 55
Wing & Evans, Inc..... 64
Winkler & Bros. Co., The Isaac..63, 68
Winterbourne & Co., S..... 58
Wishnick-Tumpeer Chemical Co... —
Wolf & Co., Jacques..... 77
Wood Products Co..... 1
Worden Chemical Laboratory..... 14
Wurster & Sanger..... 14

Buyers and Sellers Ready Reference, Page 13

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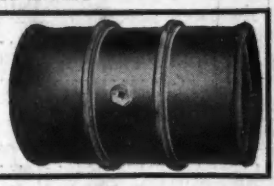

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Chemical Exposition Guide—American Chemical Society Meeting

IN TWO PARTS

Oil, Paint and Drug Reporter

PART TWO

Vol. 104. No. 12 MONDAY, SEPTEMBER 17, 1923 100 William St., New York

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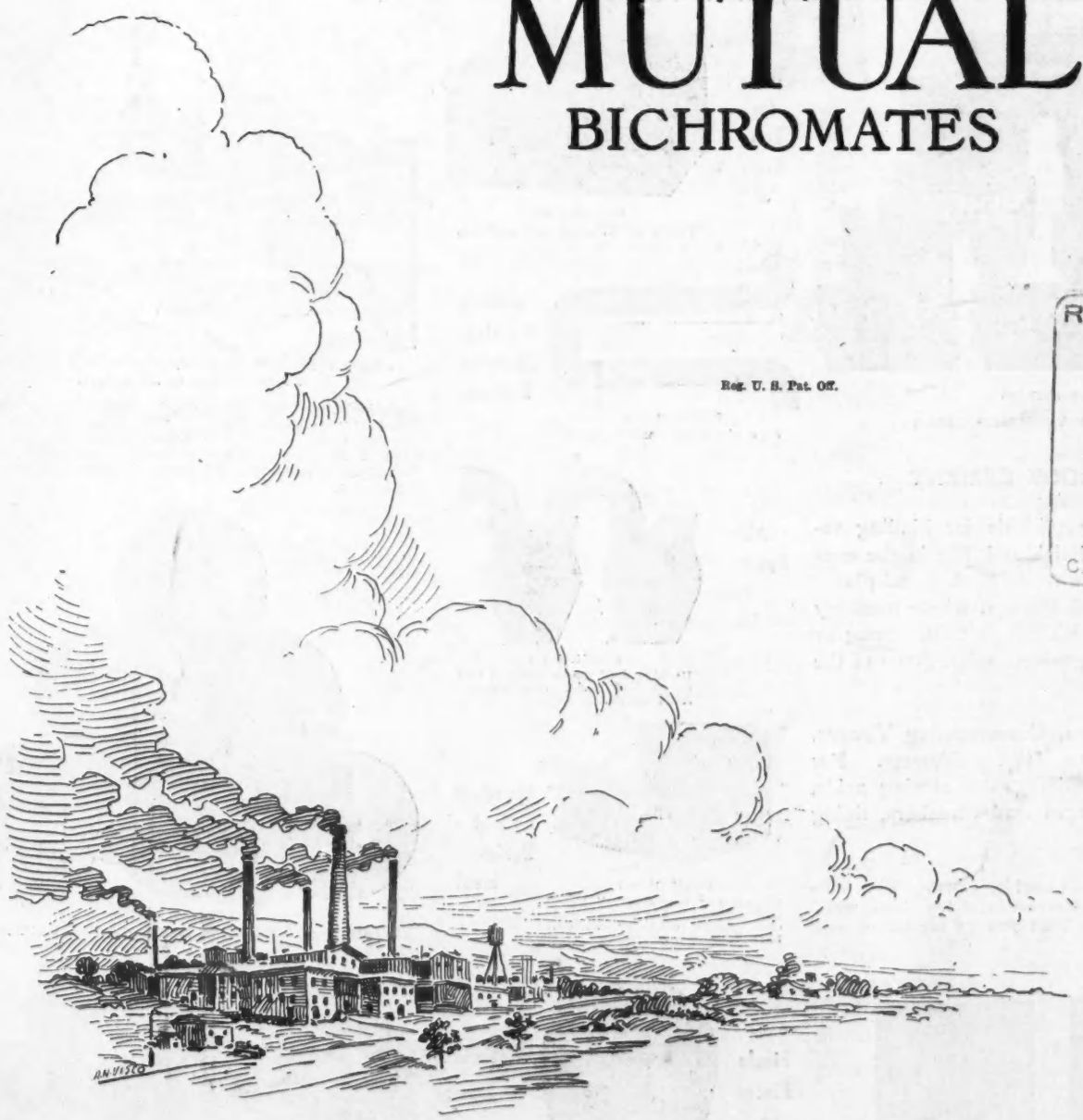

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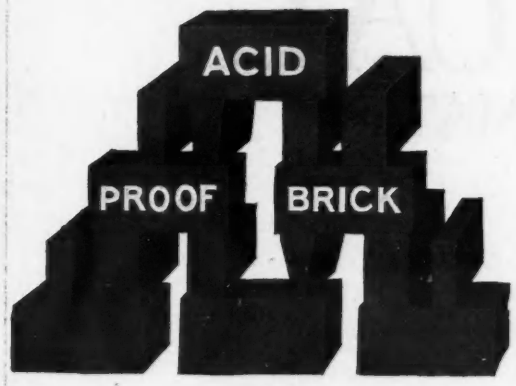

FIGURE 135
ACID PROOF VITRIFIED BRICK

ACID PROOF CEMENT

This cement is applicable for binding together Acid Proof Brick and Tile in the construction of masonry work, in chemical plants for manufacture and storage, where masonry comes in contact with hot or cold, strong or weak and liquid or gaseous acids. Some of the uses are the following:

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We have prepared a pamphlet together with blueprints describing the construction of the above, which we will be pleased to send you on receipt of your request.

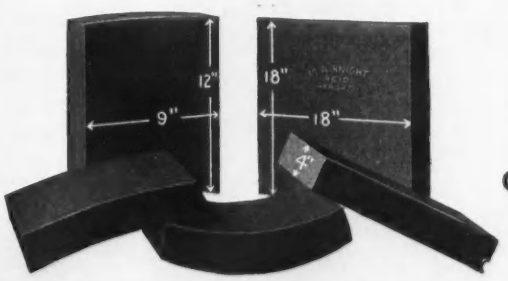
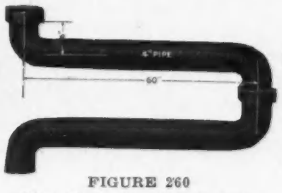


FIGURE 137
ACID PROOF RADIAL TILE

Write for Your Copy of

FIGURE 232
Tanks of all sizes and designs.



Complete Catalog Showing Faucets

FIGURE 260
Pipe of all sizes and designs.

Also Apparatus for

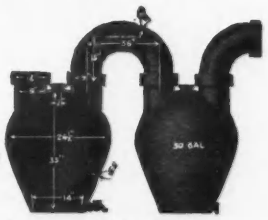


FIGURE 167
Receivers of many designs and styles and sizes. Also Cellarius-Tourills.

Chemical Plant Equipment

FIGURE 237
Laboratory Sinks of all kinds and designs made to suit your own needs with or without back, drainboards, etc.

Single Pieces to Complete Plants

FIGURE 220
Vessels of this type are more satisfactory, and actually cheaper in the long run, than jars, for storage purposes.

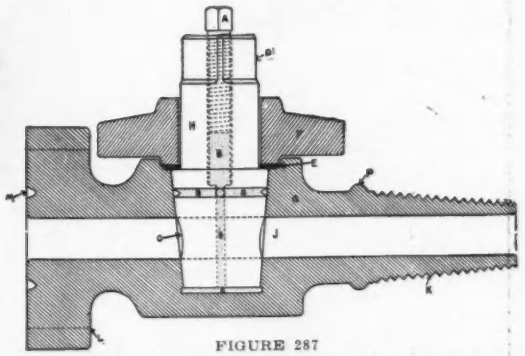


FIGURE 287
PHANTOM VIEW OF KNIGHT-MERCO PATENTED LUBRICATED PLUG VALVE

Made in bores from ½ in. to 4 in., and in many designs. Especially suitable for use with Hydrochloric Acid, Hot or Cold, Strong or Weak, also for the other mineral and organic acids as well as Alkalies and Corrosive Chemicals. Of great interest to all Plant Engineers.

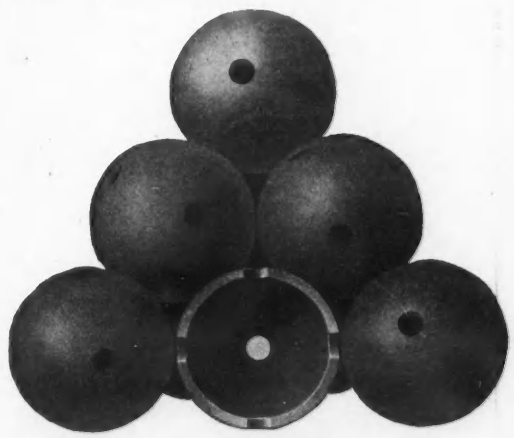


FIGURE 133
ACID PROOF HOLLOW BALLS TOWER PACKING

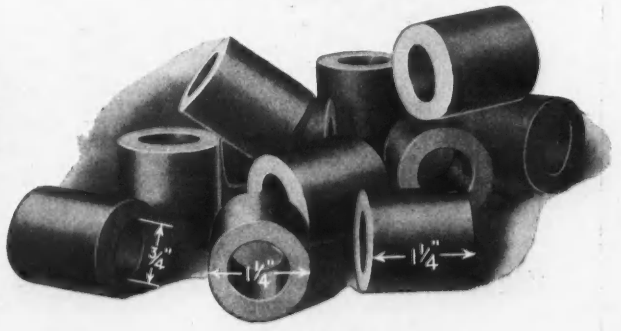


FIGURE 134
SMALL TUBE TOWER PACKING

Oil, Paint and Drug Reporter

Vol. 104. No. 12 MONDAY, SEPTEMBER 17, 1923 100 William St., New York

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Complete Guide to the

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All motion pictures will be shown on third floor

Monday, September 17

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2.00 P. M.

Formal opening of Exhibition Hall.

Motion Pictures

7.30 P. M.

"Water Power" (two reels). Courtesy of U. S. Bureau of Mines and Westinghouse Electric & Mfg. Co.

"Dynamite at Work" (one reel). Courtesy of E. I. du Pont de Nemours & Co.

"Sinking the Last American Battleships" (two reels). Courtesy of the Chemical Foundation, Inc.

"Development of and Saving Diabetic's Life with Intarvin" (one reel). Courtesy of Beth Israel Hospital.

"Snappy Shots of Chemical Warfare" (one reel). Courtesy of Chemical Warfare Service, U. S. A.

"Saving Coal in the Home" (one reel). Courtesy of U. S. Bureau of Mines.

"The Story of Sulphur and How It Is Secured" (two reels). Courtesy of U. S. Bureau of Mines and Texas Gulf Sulphur Co.

"The Story of Duriron as a Non-corrodible Material for Chemical Apparatus" (one reel). Courtesy of the Duriron Co.

Tuesday, September 18

Motion Pictures

2.00 P. M.

"The Story of Steel" (six reels). Courtesy of U. S. Bureau of Mines.

"Snappy Shots of Chemical Warfare" (one reel). Courtesy of Chemical Warfare Service, U. S. A.

"Gold Mining in Northern Ontario" (one reel). Courtesy of Ontario Department of Mines.

"The Diary of an Abrasive Stone" (four reels). Courtesy of U. S. Bureau of Mines and Carborundum Co.

7.30 P. M.

"The Story of Fire Clay Refractories" (four reels). Courtesy of U. S. Bureau of Mines.

"The History of Transportation" (two reels). Courtesy of U. S. Bureau of Mines and Westinghouse Electric & Mfg. Co.

"King Cotton" (one reel); "Electricity at Work" (one reel); "Minerals and Metals" (one reel). Courtesy of Alabama Power Co.

"Development of and Saving Diabetic's Life with Intarvin" (one reel). Courtesy of Beth Israel Hospital.

"The Story of Duriron as Material for Chemical Apparatus" (one reel). Courtesy of the Duriron Co.

Wednesday September 19

Ceramic Day

2.00 P. M.

Meeting of the American Ceramic Society in the conference room.

A. Promoting Fuel Economy in Kiln Management.
   1. "Report of Results in Co-operative Investigations by Refractories Manufacturers' Association and U. S. Bureau of Mines," by Frederick W. Donahoe, secretary Refractories Manufacturers' Association.
   2. "Possible Economies and Methods of Their Obtaining," by George A. Bole, U. S. Bureau of Mines.
   3. "Application of Hand Stokers to Kilns," by Henry H. Hyde, Flynn & Emrich Co.

B. Industrial Art.
   1. "The Industrial Art Movement, Its Possibilities in Ceramic Industries," by Richard F. Bach, curator Industrial Arts, Metropolitan Museum.
   3. "Method of Color Measurement, An Industrial Need," by A. E. O. Munsell, Munsell Color Co.

C. Federal Co-operative Movements.
   1. "Investigations by and Purposes of the Federal Specifications Board in Reference to Ceramic Products," by R. F. Geller, U. S. Bureau of Standards.
   2. "The American Construction Council, Its Aims and Methods," by D. Knickerbocker Boyd, vice-president.

D. Refractories.
   1. "The Properties of Some Commercial Refractories," by R. M. Howe, Kier Fire Brick Co.
   2. "The Manufacture of Refractories," by W. F. Rochow, Harbison Walker Refractories Co.

6.00 P. M.

American Institute Chemical Engineers, dinner at Park Avenue Hotel.

7.00 P. M.

American Ceramic Society, dinner at Commodore Hotel.

Motion Pictures

2.00 P. M.

"The Story of Motor Truck Transportation" (three reels). Courtesy of U. S. Bureau of Mines.

"Dynamite at Work" (one reel). Courtesy of E. I. du Pont de Nemours & Co.

"The Story of Asbestos and Its Manufactures" (four reels). Courtesy of U. S. Bureau of Mines and Johns-Manville, Inc.

"Operation of a Nickel Rolling Mill Producing Sheet and Wire" (five reels). Courtesy of International Nickel Co.

7.00 P. M.

"The Story of Duriron as Material for Chemical Apparatus" (one reel). Courtesy of the Duriron Co.

"The Diary of an Abrasive Stone" (four reels). Courtesy of U. S. Bureau of Mines and Carborundum Co.

"The Manufacture of Portland Cement" (two reels). Courtesy of Atlas Portland Cement Co.

"Talc Mining in Ontario" (one reel). Courtesy of Ontario Department of Mines.

"The Story of Fire Clay Refractories" (four reels). Courtesy of U. S. Bureau of Mines.

Thursday, September 20

Pulp and Paper Day

2.30 P. M.

Meeting of the Technical Association of the Pulp and Paper Industry in the conference room.

"The attitude of Men to Educational Opportunities of Study in Pulp and Paper Mills," by T. L. Crossley, Pulp and Paper Magazine of Canada.

"The Standardization of Paper by Test," by Hubb Bell, United States Testing Co., Inc., New York.

"Application of the Cottrell Electrical Precipitator to the Pulp and Paper Industry," by N. W. Sultzer, Research Co-operation, New York.

"The Preparation of Bleaching Liquors from Liquid Chlorine," by J. H. MacMahon, Mathieson Alkali Works, New York.

"The Mining of Sulphur," by Raymond F. Bacon, Texas Gulf Sulphur Co., New York.

"Silicate of Soda in the Paper Mill," by James G. Vail, Philadelphia Quartz Co., Philadelphia.

6.00 P. M.

Salesmen's Association of American Chemical Industry, dinner at Commodore Hotel.

Motion Pictures

2.00 P. M.

"King Cotton" (one reel); "Minerals and Metals" (one reel); "Electricity at Work" (one reel). Courtesy of Alabama Power Co.

"Sinking of the Last American Battleships" (two reels). Courtesy of the Chemical Foundation, Inc.

"Water Power" (two reels). Courtesy of U. S. Bureau of Mines and Westinghouse Electric & Mfg. Co.

"Saving Coal in the Home" (one reel). Courtesy of U. S. Bureau of Mines.

"Talc Mining in Ontario" (one reel). Courtesy of Ontario Department of Mines.

"The Story of Sulphur and How It Is Secured" (two reels). Courtesy of U. S. Bureau of Mines and Texas Gulf Sulphur Co.

7.30 P. M.

"The History of Transportation" (two reels). Courtesy of U. S. Bureau of Mines and Westinghouse Electric & Mfg. Co.

"Development of and Saving Diabetic's Life with Intarvin" (one reel). Courtesy of Beth Israel Hospital.

"The Story of Sulphur and How It Is Secured" (two reels). Courtesy of U. S. Bureau of Mines and Texas Gulf Sulphur Co.

"Talc Mining in Ontario" (one reel). Courtesy of Ontario Department of Mines.

"Gold Mining in Northern Ontario" (one reel). Courtesy of Ontario Department of Mines.

"Operation of a Nickel Rolling Mill Producing Sheet and Wire" (five reels). Courtesy of International Nickel Co.

Friday, September 21

2.30 P. M.

Meeting of the Technical Photographic and Microscropical Society (for members only) in the conference room. Program to be announced.

Motion Pictures

2.00 P. M.

"The Story of Motor Truck Transportation" (three reels). Courtesy of U. S. Bureau of Mines.

"The Story of Asbestos and Its Manufactures" (four reels). Courtesy of U. S. Bureau of Mines and Johns-Manville, Inc.

"The Manufacture of Portland Cement" (two reels). Courtesy of Atlas Portland Cement Co.

"Snappy Shots of Chemical Warfare" (one reel). Courtesy of Chemical Warfare Service, U. S. A.

"Development of and Saving Diabetic's Life with Intarvin" (one reel). Courtesy of Beth Israel Hospital.

"Gold Mining in Northern Ontario" (one reel). Courtesy of Ontario Department of Mines.

7.30 P. M.

"Operation of a Nickel Rolling Mill Producing Sheet and Wire" (five reels). Courtesy of International Nickel Co.

"History of Transportation" (two reels). Courtesy of U. S. Bureau of Mines and Westinghouse Electric & Mfg. Co.

"The Story of Duriron as a Non-corrodible Material for Chemical Apparatus" (one reel). Courtesy of the Duriron Co.

"Sinking of the Last American Battleships" (two reels). Courtesy of the Chemical Foundation, Inc.

"Dynamite at Work" (one reel). Courtesy of E. I. du Pont de Nemours & Co.

Saturday, September 22

Motion Pictures

2.00 P. M.

"The Story of Steel" (six reels). Courtesy of U. S. Bureau of Mines.

"The Story of Asbestos and Its Manufactures" (four reels). Courtesy of U. S. Bureau of Mines and Johns-Manville, Inc.

"Manufacture of Portland Cement" (two reels). Courtesy of Atlas Portland Cement Co.

"Water Power" (two reels). Courtesy of U. S. Bureau of Mines and Westinghouse Electric & Mfg. Co.

7.30 P. M.

"Electricity at Work" (one reel); "Minerals and Metals" (one reel); "King Cotton" (one reel). Courtesy of Alabama Pawer Co.

"Snappy Shots of Chemical Warfare" (one reel). Courtesy of Chemical Warfare Service, U. S. A.

"Sinking the Last American Battleships" (two reels). Courtesy of the Chemical Foundation, Inc.

"Development of and Saving Diabetic's Life with Intarvin" (one reel). Courtesy of Beth Israel Hospital.

"Saving Coal in the Home" (one reel). Courtesy of U. S. Bureau of Mines.

"Talc Mining in Ontario" (one reel); "Gold Mining in North Ontario" (one reel). Courtesy of Ontario Bureau of Mines.

While no change in this program is expected, it is subject to change, due to uncertainties in the arrival of films.

OIL, PAINT and DRUG REPORTER

ESTABLISHED 1871.

The following publications are incorporated in the REPORTER:—

DRUG, PAINT AND OIL TRADE
NEW YORK DRUG BULLETIN
NEW YORK DRUGGIST'S PRICE CURRENT
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WEEKLY DRUG NEWS

Published weekly. Mailed every Saturday under publication date of the following Monday, by the OIL, PAINT AND DRUG REPORTER, INC., at 100 William street, New York. William O. Allison, President; Harry J. Schnell, Vice-President; D. G. Bogert, Secretary.

SUBSCRIPTION TERMS. — For the United States $5.00; Canada, $7.00; other foreign countries, $10.00 per annum; single copies 15 cents each. All remittances should be made payable to the OIL, PAINT AND DRUG REPORTER, INC.

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Alphabetical Directory of Exhibitors

A

Space.	Name and Address.
76, 92	Abbe Engineering Co., New York.
546	Abernethy, John F., Brooklyn.
259	Ajax Chemical Co., San Francisco.
227, 228	Alabama Power Co., Birmingham, Ala.
12	Alberene Stone Co., New York.
89	Alcohol Warehouse Corp., New York.
549	Alsop Engineering Co., New York.
6	American Brass Co., Waterbury, Conn.
43	American Chemical Society.
259	American Container Co., Philadelphia.
50	American Cyanamid Co., New York.
2	American Hard Rubber Co., New York.
434	American Institute of Chemistry, New York.
324, 325	American Institute Mining and Metallurgical Engineers, New York.
273	American Mineral Co., Johnson, Vt.
511	American Motor Aerator Corp., Newark, N. J.
226	American Perfumer & Essential Oil Review, New York.
65	American Schaeffer & Budenberg Corp., Brooklyn.
65	American Steam Gauge & Valve Mfg. Co., Boston.
561	American Tank & Welding Co., Belleville, N. J.
313	American Welding Co., New York.
552, 553	Ams Max Machine Co., New York.
6	Anaconda Copper Mining Co., Perth Amboy, N. J.
6	Anaconda Sales Co., New York.
5	Anaconda Lead Products Co., Chicago.
44-A	Anti-Hydro Waterproofing Co., Newark, N. J.
44-B	Arabol Mfg. Co., New York.
321, 322	Arkell Safety Bag Co., New York.
504	Associated Cooperage Industries of America, St. Louis.
342	Ashcroft Mfg. Co., Bridgeport, Conn.
205	Avery Rock Salt Mining Co., New York.

B

18	Bakelite Corporation, New York.
310, 311	Bachmeier & Co., New York.
246-249	Bailey Meter Co., Cleveland.
314, 315	Baker & Co., Inc., Newark, N. J.
63	Baker, J., Sons, & Perkins, Inc., New York.
339	Baker, J. T., Chemical Co., Phillipsburg, N. J.
225	Baker, R. & L., Co., New York.
301	Barco Manufacturing Co., Chicago.
218	Bartlett, C. O., & Snow Co., Cleveland.
257	Barneby-Cheney Engineering Co., Columbus, Ohio.
306, 307	Bausch & Lomb Optical Co., Rochester, N. Y.
217	Beaver Mfg. Co., Ballardvale, Mass.
537, 538	Becker, Christian, Inc., New York.
76	Beach-Russ Co., New York.
338, 341	Benjamin Elec. Mfg. Co., Chicago.
245	Benzine Condensation Co., New York.
444	Blackmer Rotary Pump Co., Petoskey, Mich.
413	Blakiston's, P., Son, & Co., Philadelphia.
507	Bradley, A. J., Mfg. Co., New York.
277	Beckley Perforating Co., Garwood, N. J.
83, 84	Bristol Company, The, Waterbury, Conn.
40, 41	Brown Instrument Co., Philadelphia.

C

215, 216	Calorizing Co. of Pittsburgh, Pittsburgh.
489	Canadian Mining Journal, Gardenvale, Que.
490	Canadian Chem. and Met., Toronto, Ont.
489	Canadian Textile Journal, Gardenvale, Que.
265, 266	Cambridge & Paul Instrument Co. of Amer., New York.
533	Capes-Viscose, Inc., Delawanna, N. J.
22, 21	Carborundum Co., Niagara Falls, N. Y.
71	Carrier Engineering Corp., Newark, N. J.
13	Celite Products Co., Chicago.
289-292	Central of Georgia Ry. Co., Savannah, Ga.
567	Chemical Color & Oil Record, New York.
26, 27	Chemical Catalog Co., New York.
34	Chemical Equipment Co., Chicago.
42	Chemical and Metallurgical Engr., New York.
411	Chemical Engr. & Foundry Co., Atlanta, Ga.
54	Chadwick Boston Lead Co., Boston.
281	Chemical Equipment Assn., New York.
428-430	Chemical Warfare Service. (Lab.), Washington.
	Chemists' Club, New York.
531	Christie, L. R., & Co., Pittsburgh.
520, 521	Clark Tructractor Co., Buchanan, Mich.
70	Cleveland-Cliffs Iron Co., Cleveland.
566	Clipper Belt Lacer Co., Grand Rapids, Mich.
424	Color Trade Journal, Inc., New York.
93	Commercial Solvents Corp., New York.
18	Condensite Co. of America, Bloomfield, N. J.
342	Consolidated Safety Valve Co., Bridgeport, Conn.
202	Cooper Hewitt Electric Co., Hoboken, N. J.
312	Coors Porcelain Co., Golden, Colo.
332, 333 } 346, 347 }	Corning Glass Works, Corning, N. Y.
24	Crane Co., Chicago.

D

35, 36	Darco Sales Corp., Wilmington, Del.
72	De Laval Separator Co., New York.
62, 61	Devine, J. P., Co., Buffalo, N. Y.
542, 543	Dings Magnetic Separator Co., Milwaukee, Wis.
261	Dodd, Mead & Co., New York.

F

302	Fansteel Products Co., Inc., North Chicago, Ill.
75	Federal Phosphorus Co., Birmingham, Ala.
493-495	Fessenden, B. & A. D., Co., Townsend, Mass.
495	Fessenden Cooperage Co., Townsend, Mass.
15	Filtration Engineers, Inc., New York.
560	Filtrol Co., The, Los Angeles.
237	Fleisher, W. L., & Co., Inc., New York.
58	Fletcher Works, Inc., Philadelphia.
288	Florasynth Laboratories, Unionport, N. Y.
508	Flexo Co., The, Fredericksburg, Va.
565	Fulton Co., The, New York.

G

32, 33	General Ceramics Co., New York.
3, 4	General Electric Co., Schenectady, N. Y.
18	General Bakelite Co., New York.
561	General Tank Co., New York.
54	Georgia Lead Works, Atlanta.
54	Gibson & Price Co., Cleveland.
204	Glascote Co., The, Cleveland.
564	Goodrich, B. F., Co., The, Akron.
71	Gordon-Davis Engineering Co., New York.
201	Great Western Mfg. Co., Leavenworth, Kans.
78	Grindle Fuel Equipment Co., Chicago.
52	Grinnell Co., Inc., Providence, R. I.
505	Griplock, Inc., New York.

H

550, 551	Hanovia Chemical & Mfg. Co., Newark, N. J.
343	Hancock Inspirator Co., Boston.
60	Hardinge Co., Inc., New York.
279	Haynes Stellite Co., New York.
343	Hayden & Derby Mfg. Co., Boston.
502	Hercules Carboy Box Co., Newark, N. J.
54	Hoyt Metal Co., St. Louis.
412	Hurt, Geo. F., Engr. Corp., New York.
211, 212	Hybinette, V., Wilmington, Del.

I

259	Import Mineral Products Co., Cleveland.
90	Industrial Chemical Co., New York.
67	Industrial Filtration Corp., New York.
334, 335	Industrial Waste Products Corp., New York.
489	Industrial & Educational Press, Gardenvale, Que.
486	Industrial Management, New York.
486	Industry Illustrated, New York.
28-A	Insulin Exhibit.
415, 416	Intarvin Exhibit.
263, 264	International Nickel Co., New York.
205	International Salt Co., New York.
489	Iron & Steel of Canada, Gardenvale, Que.
433	Irving Iron Works Co., Long Island City, N. Y.

J

274	Jewell Polar Co., Chicago.
217	Jennings & Co., Inc., Boston.
48	Johns-Manville, Inc., New York.
512	Journal of Commerce, New York.
203	Judelson Evapodryer Corp., New York.

K

17	K-B Pulverizer Co., Inc., New York.
213, 214	Kellogg, M. W., Co., New York.
70	Kiefer, Karl, Mach. Co., Cincinnati.
"A"	Knickerbocker Photo Service, New York.
16	Knight, Maurice A., Akron, Ohio.
541	Kohlbusch, Herman, Sr., New York.
510	Koven, L. O., & Brother, Jersey City, N. J.

L

15	La Bour Co., Chicago.
544, 545	Lebanon Machine Co., Lebanon, N. H.
55	Leeds & Northrup Co., Philadelphia.
256	Lead Lined Iron Pipe Co., Wakefield, Mass.
223, 224	Lewis, J. P., Co., New York.
280	Lindsay Light Co., Chicago.
408	Liquid Carbonic Co., Chicago.
568	Lippincott, J. B., Co., Philadelphia.
259	Litter, D. H., Co., New York.
500	Lowe Mfg. Co., Detroit.
308, 309	Luzerne Rubber Co., Trenton, N. J.

M

300, 305	Maas & Waldstein Co., New York.
342, 343	Manning, Maxwell & Moore, Inc., New York.
503	Matheson & Atkinson, New York.
206-208	Mathieson Alkali Works, Inc., New York.
316, 317	Mallinckrodt Chemical Works, St. Louis.
318	Manufacturers Record, Baltimore.
273	Magnesia Talc Co., Waterbury, Vt.
85, 86	Merrill Co., The, New York.
414	Metric Association, New York.
259	Metro Nite Co., Milwaukee, Wis.
554	Mixing Equipment Co., Inc., New York.
263	Monel Metal Products Co., New York.
278	Mohegan Tube Co., Brooklyn, N. Y.
539, 540	Morse Chain Co., Ithaca, N. Y.
418	Moving Picture Studio Exhibit.
262	Multi Metal Co., New York.
205	Myles Salt Co., New Orleans, La.

N

66	Nash Engineering Co., So. Norwalk, Conn.
422	Nassau Valve & Pump Co., Rockville Center, N. Y.
523	National Bituminous Enamel & Paint Corp., Baltimore.
303, 304	National Lime Association, Washington, D. C.
39	National Rosin Oil & Size Co., New York.
82	Newark Wire Cloth Co., Newark, N. J.
426	Nelson, Thomas, & Sons, New York.
261	New International Encyclopaedia, New York.
421	New Jersey Chemical Society.
8, 9	New Jersey Zinc Co., New York.
253	New York Commercial, New York.
548	New York Thermometer Co., New York.
80	Norton Co., Worcester, Mass.

O

28	Obermayer, S., Co., Chicago.
21	Oil Paint & Drug Reporter, New York.
259	Ohio Pail Co., Middlefield, Ohio.
64	Oliver Continuous Filter Co., New York.
491, 492	Ontario Dept. of Mines, Toronto, Ont.

P

74	Palo Co., New York.
419	Paper Mill & Wood Pulp News, New York.
503	Pennsylvania Paper Products Co., Philadelphia.
51	Petree & Dorr, New York.
73	Pfaudler Co., Rochester, N. Y.
10	Philadelphia Gear Works, Philadelphia.
285	Philadelphia Quartz Co., Philadelphia.
528	Pittsburgh Testing Laboratory, Pittsburgh.
	Press Headquarters.
14, 15	Proctor & Schwartz, Inc., Philadelphia.
499	Pressed Steel Tank Co., Milwaukee, Wis.
489	Pulp & Paper Magazine of Canada, Gardenvale, Que.

Q

87, 88	Quigley Furnace Specialties Co., New York.

R

	Radio Exhibit.
5, 6	Raritan Copper Works, Perth Amboy, N. J.
49	Raymond Bros. Impact Pulv. Co., Chicago.
54	Raymond Lead Works, Chicago.
501	Reading Steel Casting Co., Inc., Bridgeport, Conn.
255	Reed, William, Engineering Co., Louisville.
18	Redmanol Products Co., Chicago.
10	Research Corporation, New York.
244	Resisto Pipe & Valve Co., E. Cambridge, Mass.
54	Robertson, Jas., Lead Works, Baltimore.
509, 522	Robinson Mfg. Co., Muncy, Pa.
287	Roto Co., Hartford, Conn.
60	Ruggles Coles Engr. Co., New York.

S

268	Sanvik Steel, Inc., New York.
506	Sanitary Collapsible Barrel Co., Pittsburgh.
282	Sawyer Specialty Scales Co., Jacksonville, Fla.
81	Sarco Co., Inc., New York.
221, 222	Schutte & Koerting Co., Philadelphia.
431, 432	Schwartz Sectional System, Indianapolis, Ind.
94	Scott, Ernest, & Co., Fall River, Mass.
59	Sharples Specialty Co., Inc., New York.
409	Shartle Bros., Middletown, Ohio.
210	Sholes, Inc., New York.
251	Simplex Valve & Meter Co., Philadelphia.
524, 525	Simpson, Orville, Co., Cincinnati, Ohio.
252	Smith & Serrell, Newark, N. J.
328	Southern Agricultural Chem. Corp., Atlanta.
273	Southern Minerals Corp., Waterbury, Vt.
229-232	Southern Railway System, Washington, D. C.
23	Sowers Manufacturing Co., Buffalo.
267	Stedman's Foundry & Machine Works, Aurora, Ind.
77	Stokes, F. J., Machine Co., Philadelphia.
209	Stoll, D. H., Co., Buffalo.
283, 284	Strite Machine Co., South Norwalk, Conn.
237-343	Sturtevant, B. F., Co., Hyde Park, Boston.
30, 31	Sturtevant Mill Co., Boston.
90	Suchar Process Corp., New York.
78	Swenson Evaporator Co., Harvey, Ill.

T

275, 276	Tagliabue, C. J., Mfg. Co., Brooklyn.
547	Takamine Laboratory, Inc., Clifton, N. J.
547	Takamine Commercial Corp. of N. Y., New York.
547	Tanner, Chas. S., Co., Providence, R. I.
328	Tennessee Copper Co., New York.
328, 329	Tennessee Copper & Chem. Corp., New York.
219	Tennessee Eastman Corp., Rochester, N. Y.
11	Texas Gulf Sulphur Co., New York.
471	Textiles, New York.
258	Thermo Electric Instrument Co., Newark, N. J.
340	Thomas Publishing Co., New York.
68, 69	Tolhurst Machine Works, Troy, N. Y.
537	Torsion Balance Co., New York.
259	Trainor, Edward, Philadelphia.
496-498	Tyler, W. S., Co., Cleveland.

U

45	Uehling Instrument Co., Paterson, N. J.
25	Union Sulphur Co., New York.
54	United Lead Co., New York.
53	United Filters Corp., New York.
54	United Lead-Tatham Bros. Works, Philadelphia.
54	United Lead Co. of Cincinnati, Cincinnati.
54	United Lined Tube & Valve Co., New York.
6	United Metals Selling Co., New York.
472-475	U. S. Bureau of Standards, Washington.
326, 327	U. S. Industrial Alcohol Co., New York.
330, 331	U. S. Industrial Chemical Co., New York.
254	United States Testing Co., Inc., New York.
427	Universal Oil Products Co., Chicago.

V

91	Vallez Rotary Filters, Bay City, Mich.
292, 293	Van Nostrand, D., Co., New York.
336, 337	Voland & Sons, Inc., New Rochelle, N. Y.

W

410	Welch, M. W., Manufacturing Co., Chicago.
46	Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
527	White, Fred. C., Inc., New York.
559	Williams Patent Crush & Pulv. Co., St. Louis.
78	Whiting Corp., Harvey, Ill.
319, 320	Willson Goggles, Inc., Reading, Pa.

Y

296	Young Brothers Co., Detroit.
432	York Metal & Alloys Corp., New York.

Z

269-272	Zeller Lacquer Mfg. Co., New York.

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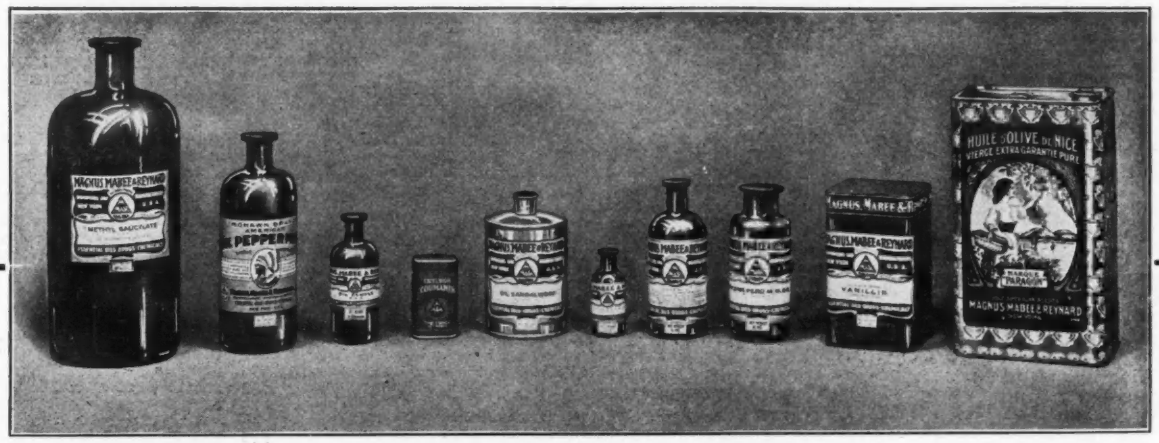

M. M. & R. ORIGINAL PACKAGES

DRUGS—LABORATORY APPARATUS—CHEMICALS

DRUGS. We offer for stock shipment a complete line of drugs, chemicals, medicinal preparations, proprietary medicines and pharmaceutical specialties. Importing direct from original sources, our drugs are required to meet high standards of purity. In our pharmaceutical laboratory we manufacture an extensive line of fluid extracts, tinctures, ointments and other galenical preparations. Our prescription department, the foundation of our business has a successful record of 72 years of service.

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LABORATORY APPARATUS. Our stock of standard bacteriological, chemical, metallurgical and pharmaceutical apparatus is the most complete in the country, and our glass blowing and instrument shops are prepared to execute promptly orders for apparatus made from special design.

Visitors to the Chemical Industries Exposition are cordially invited to inspect our show-rooms, warehouse, shops and manufacturing plant which cover a New York City block on Third Avenue from 18th to 19th Street

EIMER & AMEND

Established 1851

Third Avenue, 18th to 19th Street NEW YORK

Who, What, Where Among the Exhibits

Location and Description of Displays on View at the Grand Central Palace

To Locate a Booth, Consult the Floor Plans on Pages xiv, xv, and xvi. Booths are Grouped as Follows: 2 to 94, First Floor; 201 to 347, Second (Mezzanine) Floor; 408 to 571, Third Floor

Abbe Engineering Company, New York

BOOTHS 76, 92.—Ball mills, pebble mills, jar mills, rotary cutters for drugs and spices, and mixers will be shown. H. C. Russ, treasurer; H. F. Kleinfeldt, secretary; A. T. Beach, Jr., sales engineer, and Robert Foster and Frederick Conrad are in charge of the exhibit.

Alberene Stone Company, New York

BOOTH 12.—Stoneware laboratory equipment, including fume hoods, wall tables with reagent shelves, sinks, workbench with shelf and gutter and linings for smelting furnaces in the sulphate, kraft and soda mills of the paper industry, and in lead smelting furnaces are among the exhibits. The company's representatives at the exposition are N. N. Montgomery, Jr., F. E. Healy, F. R. Nichols, W. K. Fields, E. L. Collins, R. G. Grothe, D. L. Mills and A. Y. Meeker.

Alsop Engineering Company, New York

BOOTH 549.—Hand and electric vacuum pumps, and electric and hand-operated vacuum filters are demonstrated. Samuel Alsop and H. C. Sibley, assisted by other employes, are at the booth.

American Hard Rubber Company, New York

BOOTH 2.—The many uses of hard rubber in the chemical industry are shown. Exhibits include corrosive-proof pumps, pipe, tanks, fittings and utensils. One feature is a tall column of 8-inch hard rubber pipe surmounted by a glass globe in which the discharge of the hard rubber pump is sprayed in color. C. R. Ackerman and D. Wilkins represent the company.

American Schaeffer & Budenberg Manufacturing Company, Brooklyn

BOOTH 65.—Steam engineering instruments, including indicating and recording gauges, indicating and recording thermometers, temperature regulators, pop safety and relief valves and steam traps are demonstrated in this booth. H. V. Carlier is in charge of the exhibit. He is assisted by F. Undeutsch and W. I. Stark.

American Welding Company, New York

BOOTH 313.—Forge welded tanks of the company, the parts of which are joined at a temperature and pressure designed to give the maximum strength to the joints, are displayed at this booth. L. A. Belding, sales manager, is in charge of the exhibit.

Anaconda Copper Company, New York

BOOTHS 5, 6.—Exhibits in these booths include dry white lead, lead in oil, liquid white lead and zinc oxides, including three grades and the selected lead-free grade. Paul T. Keresey, Eastern representative, heads those in attendance at the booths.

Anti-Hydro Waterproofing Company, Newark, N. J.

BOOTH 44 A.—Methods of rendering concrete waterproof are demonstrated by this company.

Arabol Company, New York

BOOTH 28 A.—Adhesives and various uses to which the company's products are put are shown in this booth. S. Hicks, sales manager, and E. Oldham, advertising manager, assisted by other employes, are in charge.

Bachmeier & Co., New York

BOOTHS 310, 312.—Numerous new colors and chemical products, including sun-fast vat colors, are featured in this booth. The company's new artificial silk, union, chrome, cotton and sulphur color cards are being distributed and the new dyes, including vatik colors, are demonstrated. William C. Bauer, general sales manager, is in charge. He is assisted by J. H. Bachmeier, Henry Gettler, Henry J. Repp, C. Marston Lord, H. A. Tourelle and Carl Bachmeier.

Bailey Meter Company, Cleveland, Ohio

BOOTHS 246, 247, 248, 249.—Meters for gas, coal and granular materials, steam or water, boilers and a tachometer are displayed as well as the company's line of multi-pointer gauges. Several gravity recorders are shown in operation in various liquids. E. G. Bailey, president, of Cleveland, and C. R. McClure, manager of the New York office, are in charge.

Bakelite Corporation, New York

BOOTH 18. — Bakelite products adapted to many uses in the radio, electrical, automotive and jewelry industries as well as the familiar smokers' articles are features of this exhibit. Other products such as condensite, redmanol and halowax are also shown. Those at the booth are Hylton Swan, George Baekeland, George Roll, Sandford Brown, Gordon Brown, Archie Weith, C. L. Chamberlin, William Hutchinson and Allan Brown.

Baker & Co., Inc., Newark, N. J.

BOOTHS 314, 315.—This booth is devoted to displays of the precious and rare metals. Platinum laboratory ware and platinum, gold and silver plate and wire are shown. There are also displayed various forms of iridium, palladium, osmium, ruthenium and rhodium, and their salts and solutions. The exhibit is in charge of H. Klausman, F. E. Hoge, H. Whitehead, Dr. F. E. Carter, Dr. C. S. Brainin and A. M. Williams.

Joseph Baker Sons & Perkins Company, Inc., New York

BOOTH 63.—The kneading and mixing machinery of the company may be seen at this booth. A. J. Vollrath, vice-president, and H. B. Vollrath are there to answer questions of those interested.

C. O. Bartlett & Snow Company, Cleveland, Ohio

BOOTH 218.—Photographs of installations of drying and conveying equipment made by this company are shown by H. L. McKinnon, secretary, and S. Gertz, engineer.

Bausch & Lomb Optical Company, Rochester, N. Y.

BOOTHS 306, 307.—A complete line of optical scientific instruments, including microscopes for both biological and metallurgical work, a new metallographic equipment, colorimeters, refractometers and the like, is displayed. E. H. Anthes, of the New York office, is in charge.

Beach Russ Company, New York

BOOTHS 76, 92.—Various styles of pumps, such as those handling acids and those suited to high vacuum work, as well as air compressors, are shown here. H. C. Russ, C. A. Beach and E. J. Beach will answer the questions of visitors.

Beaver Manufacturing Company, Ballardvale, Mass.

BOOTH 217.—The full line of coal-tar colors manufactured by this concern is displayed. Philip R. French, treasurer, and George M. Friese, chief chemist, are in charge of the exhibit.

Christian Becker, Inc., New York

BOOTH 537.—Fine balances, including analytical chainomatic balances with riders and fractional weights eliminated up to 100 milligrams; sugar balances, bullion balances, and an assay balance weighing down to 1/500 milligram, are displayed in this booth, which is in charge of A. T. Millroy, J. W. Wetz, J. K. Dunn and K. T. Tompkins.

Beckley Perforating Company, Garwood, N. J.

BOOTH 278.—Monel metal lined wood tanks, all monel metal tanks, a 50-gallon boiling kettle, and samples of perforated metal, make up this exhibit. F. P. Huston is in charge.

P. Blakiston's Son & Co., Philadelphia

BOOTH 413.—A display of books dealing with chemistry and allied subjects published by this concern is made. W. B. Hilt is in the booth to answer questions and take orders.

A. J. Bradley Manufacturing Company, New York

BOOTH 507.—Stenciling machines, the punch points of which are forged from a solid bar of steel, and a line of oil stencil papers and inks are featured. The booth is managed by J. P. Anderson and G. J. Terrio.

Brown Instrument Company, Philadelphia, Pa.

BOOTHS 40, 41.—In addition to the standard line of Brown indicating and recording instruments the following new instruments are shown: Brown hydrogen ion recorders, alkalinity and acidity recorders, oxygen contact recorders, and indicating and recording temperature control, signalingg and alarm instruments; also the new electric CO_2 recorder, which does away with the new limitation of CO_2 recorders operative on other principles. These instruments will be demonstrated. The following are at the booth: R. P. Brown, president; Geo. W. Keller, sales manager; J. P. Goheen, secretary; R. B. McCafferty, sales engineer; W. S. Koop, sales engineer; E. M. Hertzler, sales engineer; W. R. Moore, sales engineer; F. G. Eisley, sales engineer; P. S. Sears, sales engineer; J. D. Andrews, New York district manager; Geo. Goodman, sales engineer; Geo. P. Beck, Boston district manager; O. W. Stowe, pyrometer engineer; E. A. Keeler, research manager.

Calorizing Company, Pittsburgh, Pa.

BOOTHS 215, 216.—A display of calorized tubes, calitex, and the calco recuperator may be seen. The tunes are used in the condenser and heat exchanger work; calite is the cast alloy for high temperatured work, guaranteed for a safe working temperature of 2,200 degrees Fahrenheit.

Cambridge and Paul Instrument Co. of America, Inc., New York

BOOTHS 265, 266.—The following products of the company may be seen: Electrical CO_2 recorders, electrical distance thermometers, thermo-electric pyrometers, optical pyrometers, patented temperature regulators, pressure recorders, dial draught gauges, electrical instruments. Those in attendance are: C. W. Campbell, sales manager; F. V. Schaal, sales representative; J. V. Digby, technical expert.

Carborundum Company, Perth Amboy, N. J.

BOOTHS 21, 22.—The exhibit consists principally of carborundum refractories, various sizes and grades of abrasive wheels, discs and rubbing brocks. There is also an assembly of the Cannon radiating furnace and a model of a sponge iron furnace. The refractory division of the company is represented by C. E. Hawke, sales manager; S. A. Fenno, assistant sales manager; H. B. Cannon, W. L. Meek, J. A. King, K. I. Solt. The abrasive division by F. H. Harrington, district sales manager, New York City.

Celite Products Company, Chicago

BOOTH 13.—Those interested in commercial filtration will find here the Filter-Cel, one of the leading products of this company. Celite, a light, bulky mineral filler, is also displayed, together with Sil-O-Cel heat insulation brick, block, powder and cements. A S. Elsenbast is in charge of the booth.

Central of Georgia Railway Company, Atlanta, Ga.

BOOTHS 289, 290, 291, 292.—Emphasis on minerals is noted in this display. Special attention is given to bauxite and several varieties of clay, including common brick and building tile, clay, fire clay of the coal measures, kaolin clay, both primary and sedimentary, and the high duty refractory clays of the Costal Plain. In all, 41 mineral samples are shown. Representing the company are: J. M. Mallory, general industrial agent; R. T. Stull, assistant general industrial agent; T. Poole Maynard, geologist; and Charles B. Niehaus.

Chemical Catalog Co., Inc., New York

BOOTHS 26, 27.—The new eighth annual (1923) edition of the Chemical Engineering Catalog and other scientific books, including the American Chemical Society monograph series, published by this company, will be shown.

Chemical Engineering & Foundry Company, Atlanta, Ga.

BOOTH 411.—Machinery panels and many kinds and description provide an interesting display. In charge of the booth are: E. Josephs, president; John C. Mooar, secretary; D. L. Pollock, sales engineer, and F. H. Gardner, chief engineer.

L. R. Christie & Co., Pittsburgh, Pa.

BOOTH 531.—A line of materials dried, together with photographs and drawing of the products of this company, are displayed. L. R. Christie, H. Dunning and W. J. Lueckel are in charge.

Cleveland-Cliffs Iron Company, Cleveland, O.

BOOTH 79.—This display is unique of its kind. The company manufactures hardwood chemicals, such as methanol, C. P. acetone, acetate of lime, acetic acid and all chemicals produced from beech, birch and maple. A house and lawn furniture, such as settees, chairs and tables, have been made from birch, and the entire exhibit is surrounded by peeled birch. A certain quantity of hard wood is also shown in comparison with chemicals derived from the same. The exact quantity of all chemicals produced from the specified amount of wood is shown. Charles B. Hall is sales manager for the chemical department of the company.

Clipper Belt Lacer Co., Grand Rapids, Mich.

BOOTH 566.—The complete Clipper line of belt lacers, belt hooks and twisted rawhide pins and fibro pins are shown. Special attention is directed to the new Clipper belt cutter, which will square and cut and make the belting up to six inches in width, and this with but slight pressure on the handle. Clipper rustproof hooks are also a new product of the company. Fred E. Best is in charge of sales promotion.

Find a New Market: Booth 21

The alcohols, esters and the associated products mentioned here are manufactured by us on a large tonnage basis for *general industrial uses;* as refined chemicals of unexcelled purity for *scientific and research purposes;* and as *special specification products* to conform to the most exacting manufacturing requirements.

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Perry Payne Bldg.

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Union Trust Bldg.

Kansas City
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Acetic Ether
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Specializing in

Amidopyrine - Antipyrine - Cacodylates - Camphor - Guaiacol Carbonate - Salicylates

Cooper Hewitt Electric Company, Hoboken, N. J.

BOOTH 202.—The equipment exhibited here includes the Uniarc test cabinet, the Uniarc Laboratory Outfit and the Lab Arc. These lamps are sources of ultra-violet light for industrial and research work in photo-chemistry, bacteriology and phototherapy. Two new types of Cooper Hewitt Lamps for industrial illumination and photographic work may be seen. M. B. Firehock is in charge, assisted by R. D. Mailey, L. J. Buttolph, W. J. Winninghoff and W. Walker, all of the engineering department.

Corning Glass Works, Corning, N. Y.

BOOTHS 332, 333, 346, 347.—Pyrex laboratory glassware and Pyrex industrial ware, which includes large cascade and evaporating dishes, acid towers, socker pipes, pipe lines, and such heavy glassware as is used in chemical manufacture, provide an exhibition of much taste and interest. G. B. Hollister is sales manager for the company.

Crane Company, New York

BOOTH 24.—A complete line of pipe, valves and fittings in bronze, cast and malleable iron, and cast and forged steel, are shown. There is also displayed a line of iron ammonia valves, fittings, cooling coils, etc., in addition to a number of steam specialties, such as the Cranetilt steam traps, automatic stop check valves, A. S. M. E. boiler code pop safety valves.

Darco Sales Corporation, New York

BOOTHS 35, 36.—Articles exhibited include Darco activated carbon, and various oils, chemicals, etc., showing the result of treatment with darco. Victor S. Allien and Arthur A. Jackson are at the booths.

De Laval Separator Company, New York

BOOTH 72.—Centrifugal apparatus for purification and separation of various liquids are seen. W. D. Cleary is in charge.

J. P. Devine Company, Buffalo, N. Y.

BOOTHS 61, 62.—Photographs showing installations of the company's apparatus forms the backbone of this display. They are many in number and give an excellent view of the products of the company. J. P. Devine, president; C. P. Devine, vice-president; L. W. Graves, sales manager; Graham Devine, H. E. Dimmick and H. N. Howes are in attendance.

Dings Magnetic Separator Company, Milwaukee, Wis.

BOOTHS 542, 543.—Two magnetic separators in operation and flanked by many photographs showing typical installations, as well as a display of separated materials, all combine to show the products of this company to advantage. Those in attendance are: E. S. Hirschberg, J. E. Randall, P. A. Mayer and G. I. Thatcher.

Dorr Company, New York

BOOTH 50.—The main feature of this exhibit is a closed circuit plant, consisting of a Dorr bowl classifier, a Dorrco rotary pipe conveyor, a Dorr thickener and a Dorrco pressure pump operating on a material composed of clear water and slime (white lead) and sand. In addition to this, the Dorr agitator, Dorrco screen, Dorr sewage clarifier, Dorrco pump, a Dorrco valve and other equipment will be shown. Engineers will be in charge to explain the uses and operation of the equipment.

Dow Company, Louisville, Ky.

BOOTHS 529, 530.—This exhibit consists of a miniature conveying system in operation, handling sample packages. The system, which is continuous and handles the packages throughout the cycle without assistance from human hands, includes some roller gravity conveyor, a roller spiral, a belt conveyor and an inclined slat conveyor. The exhibit is in charge of Harry Dunning and W. J. Lueckel.

Duriron Company, Dayton, Ohio

BOOTH 19.—A full display of the acid-proof equipment of this company is displayed. This includes kettles, pumps, piping, cocks, valves, return bends, cascade systems, etc., which are connected in a continuous system, all members of which being shown in their related connection and in proper position for practical operation. There is also a full sized chemical hood equiped with Duriron exhaust fans and small hemispherical sinks for removing fumes and wastes. A typical arrangement of sinks and drains for a chemical laboratory; a steam jacketed vessel for potassium bichromate solution used in cleaning glassware, and an assortment of pipe and fittings completes the display. All officers and engineers of the company are in attendance.

Eastman Kodak Company, Rochester, N. Y.

BOOTHS 219, 220.—The Eastman Kodak Co., the Tennessee Eastman Corporation, and the Eastman Chemical Corporation are combined in these booths. The following merchandise is on display:—Selections from the Eastman tested chemical and Eastman organic chemical lines, engravers' chemicals, selections from the Tennessee Eastman Corporation and Eastman Chemical Corporation lines, Eastman universal colorimeter, clinical camera outfit, Cine-Kodak outfit with luminous screen projecting laboratory films.

Economic Machinery Company, Worcester, Mass.

BOOTH 47.—This company manufactures a line of labeling machinery, including the World automatic rotary labeler and the World can labeler. C. E. Butler is in charge, assisted by L. W. Howell, B. A. Brown, A. P. Ekvall, E. B. Moor, A. V. Wilkins, A. O. Frykholm, N. Savaria, S. Strom, A. C. Meyer and H. Anderson.

Egyptian Lacquer Mfg. Company, New York

BOOTHS 233, 234, 235, 236.—Innumerable articles ranging from the cheapest toys to costly silver and gold, all of which have been treated by Egyptian lacquers or lacquer enamels provide one of the most diversified displays at the exhibition.

Eimer & Amend, New York

BOOTH 58.—The display of this company consists in the main of apparatus developed under the company's supervision. This includes the following:—"MCA" standard apparatus, according to the Manufacturing Chemists Association standards:—The MacMichael viscosimeter, Wysor polishing and grinding machine, Juerst ebulliometer, Bader colorimeter, Mathieson bleach tester, Hortvet cryoscope, Hortvet sublimator, Bausch & Lomb and Spencer microscopes, Barnstead stills, Freas, automatically controled, electrically heated ovens, multiple replaceable unit furnace and hot plate, United States navy emulsifier, Braun crusher, Gramercy reagent bottles, Edgar Purdum rapid electrolysis cell, Fleming combustion bulb, Fisher absorption bottle, Bingham & Green plastometer, Menzies & Wright ebulliometer, E. & A. standard analytical balance, E. & A. standard students' balance. E. P. Churchill will be regularly in attendance at the booth. Others who will be in attendance are F. W. Shulenberger, R. S. Chalfont, T. M. Saulters, J. T. Little, A. O. Eimer and G. Heinz.

Electro-Chemical Supply Engineering Company, Philadelphia, Pa.

BOOTH 297.—A Vorce electrolytic chlorine cell for the manufacture of chlorine gas and caustic soda solution is displayed. There is also shown Duro acid-proof cement and brick for laying up acid tanks, towers and other acid-proof construction. Franklin Wedge, manager, is in charge.

Charles Engelhard, Inc., New York

BOOTHS 344, 345.—The exhibit of this company covers an extensive line of scientific instruments for industrial purposes. There is also a complete line of impervite refractory porcelain shown in the form of crucibles, boats, combustion tubes, pyrometer tubes, etc. Electric resistance thermometers, both indicating and recording, are shown in operation.

Automatic temperature regulators are demonstrated in connection with Thermo-Electric pyrometers, electric resistance thermometers and thermostats. Indicating and recording instruments for gas analysis operating on the principle of thermal conductivity are demonstrated in operation on sulphur dioxide gas. J. Kremer, H. F. Roberts, J. H. Oetjen, C. W. Hubbard and R. W. Newcomb are in attendance.

Edward Ermold Company, New York

BOOTHS 534, 535, 536.—One semi-automatic improved Ermold labeler is displayed. This machine automatically labels and discharges bottles to a moving belt conveyor at a rate up to 48 bottles per minute. There is also shown one hand feed and hand discharge labeler. Those in attendance include Watson A. Guthrie, secretary-treasurer; E. Eugene Blauvelt, assistant manager, and John H. Wieland, chief mechanic.

Everlasting Valve Company, Jersey City, N. J.

BOOTHS 37, 38.—The Everlasting tandem valve for boiler room equipment and the Everlasting valve is shown in addition to the Flatplug valve—a Globe type of sliding valve. For fire protection in isolated spots where lines are subject to freezing, the company presents its shockless pendulum valve. John H. Allen, president; E. N. Corning, railroad and export manager, with Charles Glees and Stanley E. Carmen of the sales staff are at the booth.

Federal Phosphorus Company, Birmingham, Ala.

BOOTH 75.—An interesting presentation of phosphoric acid and phosphoric acid products have been brought together here. Theodore Swann, president; Neil Neville, sales manager; J. N. Carothers, chemical engineer, are assisted by A. R. Gerber, A. A. Walters and E. L. Winn in meeting visitors at the booth.

B. & A. D. Fessenden Company, Townsend, Mass.

BOOTHS 493, 494, 495.—The products of this company include barrels, pails and tubs of all descriptions. A full line is presented in the booths. T. E. Flarity is in charge of the display.

Filtration Engineers Incorporated, New York

BOOTH 15.—One unit, Feino drying system, using a Proctor dryer of semi-commercial size, continuously filtering and drying ground whiting, demonstrates the practical operation of a new method of drying chemical precipitates. Arthur Wright, sales manager; Frank W. Young, chief engineer, and Carrell C. Bryant, sales engineer, are meeting visitors at the booth.

W. L. Fleisher & Co., New York

BOOTHS 237, 238.—Air conditioning apparatus designed for both humidifying and dehumidifying, and for drying at low temperatures is shown. Those in charge of the booth call attention to successful installations the company has made for drying shellacs and gelatines and the mottling of enamel ware. Those at the booths include

Florasynth Laboratories, Inc., New York

BOOTH 288.—Flavor extracts and perfumers' raw materials, with a full line of synthetic aromatic chemicals, are shown in this exhibit, which is in charge of Louis A. Rosett, president of the company; Charles L. Senior, vice-president; and Dr. Alexander Katz, secretary and treasurer.

General Ceramics Company, New York

BOOTHS 32, 33.—Acidproof stoneware and machinery, including an exhaust fan for handling corrosive gases and a centrifugal pump for moving acids, are shown in this exhibit. Another feature is a machine for etching copper plates by means of a spray of nitric acid or ferric chloride. The exhibit is in charge of Percy C. Kingsbury, assisted by Hubert Royer, K. J. Peters and C. S. Wagner.

Gordon-Davis Engineering Company, New York

BOOTH 71.—The new 1923 carrier built Gorden dryer is shown in this exhibit.

Great Western Manufacturing Company, Leavenworth, Kans.

BOOTH 201.—The display shows Combs gyratory screening and sifting machines, and is in charge of Charles F. Murphy, the Eastern agent of the company.

Hardinge Company, Inc., New York

BOOTH 60.—The Hardinge mills are shown in this exhibit. H. W. Hardinge, the president of the company, has charge of the exhibit, assisted by Harlowe Hardinge, V. A. Stout, G. F. Metz and W. H. Withington.

Haynes Stellite Company, New York

BOOTH 279.—Haynes stellite, tool bits and welded tools for turning, boring and planing; blades for milling cutters, boring bars, reamers and solid milling cutters are shown. The exhibit is in charge of A. B. Leonard, J. H. Maguire, F. H. Becker and E. E. LeVan.

Industrial Chemical Company, New York

BOOTH 90.—This company has a joint exhibit with the Suchar Process Corporation, which has been appointed sole distributor for the suchar carbon for the treatment of sugar, syrups and molasses manufactured by the Industrial Chemical Co. In addition to decolorizing and deodorizing carbon there is shown alcohol, carbon black, tanning extracts and precipitated chalk. The Industrial Chemical Co. is represented by J. Wrench, C. H. Dickinson, R. Renouf and M. F. Hughes, and the Suchar Process Corporation by B. N. Glick, G. E. Trenkler and A. A. Coffin.

International Salt Company, New York

BOOTH 205.—All kinds of salt are shown. The display is in charge of George A. Walter and H. J. Osborn.

Jennings & Co., Boston, Mass.

BOOTH 217.—This exhibit consists of dyestuffs. It is in charge of Waldo Farrar and Robert E. Fuller.

Jewell Polar Company, Chicago, Ill.

BOOTH 274.—This company exhibits water distilling apparatus and general sheet metal products for laboratory and industrial use. The display is in charge of A. C. Jewell, R. B. Hayward and G. A. Boswin.

Judelson Evapo-Dryer Corporation, New York

BOOTH 203.—The exhibit shows a standard Judelson evapo-dryer. It is in charge of Julius Judelson, R. F. Mundy and J. F. Collins.

K-B Pulverizer Company, New York

BOOTH 17.—There is shown in this exhibit a unit system of powdered coal burning and a steel hammer mill pulverizer for ores, limestone, fertilizers, chemical salts, etc. Those in attendance are J. K. Blum, D. L. Braine, E. W. Swartwout and P. W. Webster.

M. W. Kellogg Company, Jersey City, N. J.

BOOTHS 213, 214.—This firm exhibits forge welding and high pressure piping. The exhibit is in charge of Richardson Dilworth.

Karl Kiefer Machine Company, Cincinnati, O.

BOOTH 70.—This exhibit shows filling machines, corking machines, filters, conveyors, rinsers, pumps and percolating equipments. The exhibit is in charge of E. E. Finch, A. J. Sterling, M. C. Finn, J. S. Zweibel and Joseph Eckhoff.

Maurice A. Knight, East Akron, Ohio

BOOTH 16.—This exhibit includes a full line of acid and corrosion proof chemical stoneware. The exhibit is in charge of Maurice A. Knight, Charles Dennison, Samuel J. Baril, Percy Sawyer, Comfort E. Brown and E. H. Miller.

Herman Kohlbusch, New York

BOOTH 541.—Laboratory balances are shown in this exhibit, which is in charge of August F. Buttenbaum.

Find a New Market: Booth 21

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KEMFERT
SALTS

KEMFERT
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The Highest Potash Quality in the World

90 to 98%
Potassium Chloride

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NINTH EXPOSITION
OF
CHEMICAL INDUSTRIES

Grand Central Palace
NEW YORK CITY
September 17th to 22nd
1923

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J. M. Mallory
General Industrial Agent
Central of Georgia Railway Company
233 West Broad St.
SAVANNAH : : GEORGIA

Exhibit will embrace

The Commercial Minerals and other Chemical Resources of Georgia and Alabama

Complete Literature describing the mineral deposits and materials

Technical men in charge

LaBour Company, Chicago Heights, Ill.

BOOTH 15.—This company exhibits in conjunction with Procter & Schwartz, Inc., and Filtration Engineers, Inc. The exhibit shows pumps, filters and driers in operation; it is in charge of H. E. LaBour, Arthur Write and Frank Young.

Lead Lined Iron Pipe Company, Wakefield, Mass.

BOOTH 256.—This exhibit showe acid resisting lead-lined iron pipe. It is in charge of T. E. Dwyer, J. D. Dwyer, F. H. DuBois and D. H. Regan.

Lebanon Machine Co., Inc., Lebanon, N. H.

BOOTHS 544, 545.—Hatton piston-rotary pumps, liquid and vacuum, made in gray iron, navy bronze and monel metal; acid pumps, water systems, and a vacuum pump for heating systems are shown in these booths. Those in attendance are Philip R. Hatton, B. E. Chenard, Howard W. Ray, Rubin Lewis and A. G. Blodgett.

Lindsay Light Company, Chicago, Ill.

BOOTH 280.—This display will include chemicals made by the company, such as zirconium oxide, thorium, cerium, titanium, zirconia, titanium potassium oxalate and others, and also finished goods made from rare earth raw materials.

Luzerne Rubber Company, Trenton, N. J.

BOOTHS 308, 309.—A general line of hard rubber pipe, fittings, special articles for the handling of chemicals, alkalies and other corrosive materials, also hard rubber closet seats and radio materials are shown in this exhibit, which is in charge of Harry E. Case and Willis Ulmer.

Maas & Waldstein Company, New York

BOOTHS 300, 305.—Real leather coated with pyrexylin, wood and metal coated with lacquers and lacquer enamels are shown in this exhibit, which is in charge of H. C. Flanigan, T. B. Haddow, J. A. Weiss, H. E. Maynard, G. J. Karl and W. S. Elwin.

Magnesia Talc Company, Waterbury, Vt.

BOOTH 273.—This company will exhibit talc both crude and manufactured into powder and in various stages of slabs for the manufacture of talc crayons. The exhibit is in charge of J. H. Burleigh.

Mallinckrodt Chemical Works, St. Louis, Mo.

BOOTHS 316, 317.—This exhibit features reagent chemicals. In addition there is a display of medicinal chemicals, also a photographic group and a number of special products in the line of industrial chemicals. The exhibit is in charge of A. A. Wasserscheid.

Manning, Maxwell & Moore, Inc., New York

BOOTHS 342, 343.—A display of finished and unfinished casting made of monel is a feature of this display, which is in charge of W. P. Bradbury, S. J. Sorensen, H. U. Upton, W. J. H. Miller, Philip Ryan and N. B. Carlton.

Mathieson Alkali Works, Inc., New York

BOOTHS 206, 207, 208, ALSO 100, 165.—This company has erected a special booth and exhibits, among other things, a model bleach plant for paper mills. In booths 100 and 150 are shown cylinders of liquid chlorine, samples of caustic soda, soda ash, bleaching powder, bicarbonate of soda, benzoate of soda, coumarin and many other of the company's products. The representatives of the company in charge are J. W. Boyer, R. J. Quinn, E. E. Routh, W. D. Marshall, J. B. Peake and Philip De Wolf.

Merrill Company, New York

BOOTHS 85, 86.—Merco Nordstrom lubricated plug valves are shown in this exhibit, which is in charge of H. P. MacGregor, Thomas Jabine and Daniel Whitlock.

Metric Association, New York

BOOTH 414.—This is an educational exhibit showing the advantages of the universal use of the metric system of weights and measures. Howard Richards, Frederic L. Roberts and John Gaillard are in charge.

Morse Chain Company, Ithaca, N. Y.

BOOTHS 539, 540.—A prominent feature of this exhibit is a balopticon showing on a screen a series of views of Morse chain drives as used around the world in the chemical industries and also views of the company's plant.

National Rosin Oil & Size Company, New York

BOOTH 39.—This exhibit shows a complete line of rosin oils and pine pitches and is in charge of W. Lathrop Hopkins and Richard Bender.

New Jersey Zinc Company, New York

BOOTHS 8, 9.—All the products of the New Jersey Zinc Company and the Durex Chemical Company, a subsidiary, are displayed, but the main exhibit is that of the use of zinc oxide in rubber. The products produced and displayed include: Barium carbonate, blanc fixe, metallic cadmium, cadmium yellow, leaded zinc oxides, lithopone, ocher, muriated acid, salt cake, sodium sulphide, slab zinc, sulphuric acid, spiegeleisen, zinc chloride, zinc dust, zinc oxides, zinc plats and strips, chemically pure zinc sticks and zinc sulphide. W. Homer Hendricks, general sales engineer, is in charge of the display. He is assisted by E. W. Boughton, B. R. Silver, E. L. Carey, L. H. Trott, E. C. Fuller, H. Hedden, G. B. Horsful, C. A. Stedman, J. P. Dunphy, W. J. Keuhn and F. W. Jones.

New York Thermometer Company, New York

BOOTH 548.—Thermometers and hydrometers.

Norton Company, Worcester, Mass.

BOOTH 80.—Alundum and crystolon refractory ware feature the exhibit. C. W. Saxe and Robert Kirkpatrick are in charge of the booth.

Oliver Continuous Filter Company, New York

BOOTH 64.—An Oliver installation showing method of construction, principle of operation, etc., will be exhibited. In attendance will be Messrs. J. F. D'Antonio, Chas. Fuhrmeister, Jr., Frederic J. Griffin, C. W. Morse, H. A. Morrison and R. G. Walker.

Ontario Department of Mines, Toronto, Canada

BOOTHS 491, 492.—Minerals and metallurgical products, including gold, silver, nickel and other ores, with particular stress on gold mining, an industry which is making rapid strides in the Province of Ontario. Various alloys and compounds of the metal cobalt will be shown, as well as practically all of Ontario's non-metallic minerals with their refined products. W. K. McNeill, provincial assayer, will be in charge of the exhibit.

Orville Simpson Company, Cincinnati, O.

BOOTHS 524, 525.—Exhibit consists of "Rotex" sifters for sifting chemicals and other materials through sieve meshes as fine as 300 to the lineal inch. Representatives of the company in attendance are Hugh Garvin, John Schott and Lowe Simpson.

Palo Company, New York

BOOTH 74.—Ives' tint photometer, daylight lamps, temperature furnaces, filter paper, spectrometers, polariscopes and rhotanium, a substitute for platinum, are among the articles exhibited. H. Peterson and M. J. Seavey are in charge of the booth.

Pennsylvania Paper Products Co., Manayunk, Philadelphia, Pa.

BOOTH 503.—Fiber cans are displayed. Exhibit in charge of Matthe-son & Atkinson.

Philadelphia Quartz Co., Philadelphia, Pa.

BOOTH 285.—Exhibit consists of silicate of soda in its various forms. In attendance at the booth will be James G. Vail, John D. Carter, William Stericker, R. C. Brown, W. H. Buxton and H. M. Fricke.

Pfaundler Company, Rochester, N. Y.

BOOTH 73.—Glass enameled steel products are exhibited, including plain and jacketed containers, kettles and tanks. The following representatives of the company are in attendance:—W. D. Pheteplace, R. B. Kilmer, I. E. Colvin, P. S. Barnes, W. E. Gray, Jr., and H. S. Tvedt.

Pressed Steel Tank Company, Milwaukee, Wis.

BOOTH 499.—Exhibit consists of a line of steel containers suitable for the transportation and storage of compressed gasses under pressure as well as various special requirements. R. P. Dieckelman is secretary of the company.

Quigley Furnace Specialties Company, New York

BOOTHS 87, 88.—High temperature insulation in various forms and high temperature cement for bonding fire brick and other refractories are exhibited. Those in attendance are W. S. Quigley, president; J. H. McPadden, secretary; W. H. Gaylord, traveling sales manager; M. F. King, C. C. Gantzman, H. M. Miller and Leo Eslick.

Anaconda Copper Mining Company, New York

BOOTHS 5, 6.—A joint exhibit with the American Brass Co., Raritan Copper Works, United Metals Selling Co., International Smelting Co., Anaconda Lead Products Co. and Anaconda Sales Co. The display is in charge of S. Skowronski and consists of ores and minerals from the mines and the various stages of concentrating, smelting, converting and refining of copper and zinc. A special feature is the display of Anaconda roofings in both copper and zinc. An extensive display is also made of Anaconda white lead. The fertilizer department of the company is exhibiting superphosphate.

Reading Steel Casting Company, Inc., Bridgeport, Conn.

BOOTH 501.—Reading cast steel valves, fittings and flanges; Pratt & Cady bronze and iron valves and asbestos packed cocks. In attendance will be R. T. Hatch, J. P. Ferguson, J. F. Isaacs, E. Coil Mages and William Wagner.

William Reed Engineering Company, Louisville, Ky.

BOOTH 255.—Filters for removing valuable or objectionable dirt from air and also for furnishing dust free air for drying chemicals and similar purposes. Officers and representatives of the company in attendance are J. F. Reed, J. H. Hanley, Jr., C. P. Hegan, G. H. Day, W. M. Reed and H. C. Murphy.

Research Corporation, New York

BOOTH 10.—Cottrell electrical precipitation processes displayed. P. E. Landolt, H. M. Pier and R. U. Wood are in charge of the exhibit.

Resisto Pipe & Valve Company, New York

BOOTH 244.—Among the products exhibited are lead-lined, covered and coated pipe, valves, fittings, tanks and acid pumps and plug cocks as well as other acid resisting products for carrying and storing acids or corrosive liquors. G. H. Checkley, sales manager, is in charge of the display.

Roto Company, Hartford, Conn.

BOOTH 287.—Articles exhibited are tube cleaners for water and fire tube boilers, condensers, heaters, arch still, locomotive arch tubes and cap cleaning machines. W. R. Van Nortwick, W. M. Kelley and J. V. Doherty are in attendance at the booth.

Ruggles-Coles Engineering Company, New York

BOOTH 60.—Dryers produced by the company will be featured. In attendance at the booth will be F. E. Finch, president, and J. K. Towers, sales engineer.

Sandvik Steel, Inc., New York

BOOTH 268.—A one-tenth size working model of a steel conveyor belt, samples of various widths of belt and finishes with photographs of many different types of installations made. In charge of the booth are: Anders Johnson, vice-president; Harry Carlson, sales manager, and Arthur Belloff, engineer.

Sarco Chemical Company, New York

BOOTH 81.—Steam traps for high and low pressure, temperature regulators, thermostatic radicator traps, with a new type of bellows for steam pressures are featured in the exhibit, which also includes the Sarco self-cleaning straightway strainer and blast traps.

Schutte & Koerting Company, Philadelphia

BOOTHS 221, 222.—The exhibit consists of a hard lead vertical centrifugal pump designed for handling liquid acids.

Schwartz Sectional System, Indianapolis

BOOTHS 431, 432.—Laboratory filing cabinets for chemicals, reagents, samples, apparatus and instruments are on view. Auxiliary desks are also shown. P. Schwartz, president of the company, is in attendance.

Ernest Scott & Co., Fall River, Mass.

BOOTH 94.—Photographs of installations put in by this company, and samples of the products made by them, such as residue meals from beans, seeds, nuts, suitable for cattle feed; special apparatus and machinery for the recovery of anything of value that is contained in factory waste. Welcoming visitors are: H. Austin, manager; R. W. MacGregor, assistant manager; Clyde B. Hutchison and C. E. Bradley.

Sharples Specialty Company, Philadelphia

BOOTH 59.—A machine for handling liquid acids made of monel metal is the chief attraction here. The booth is in charge of the president of the company, P. T. Sharples, assisted by Lee H. Clark, Eugen Ayres, Homer Cloukey, Fred A. Frank.

Sholes Incorporated, New York

BOOTH 210.—Construction of monel metal, nickel and copper of particular interest to dyers, chemical manufacturers and varnish makers and those who use or need equipment that must withstand acid corrosion. S. P. Snelling is in charge.

Simplex Valve & Meter Co., Philadelphia

BOOTH 251.—This exhibit consists of the Simplex meter register for indicating the rate of discharge, recording the rate of flow and totaling the rate of flow in connection with the use of a venturi tube in lines carrying hot or cold water, oils and chemical solutions.

Southern Minerals Corporation, Cleveland, Tenn.

BOOTH 273.—Specimens of silica prepared for various uses are shown, as well as specimens in crude state.

Southern Railway System, Washington, D. C.

BOOTHS 229, 232.—The natural resources of the territory served by the line includes a comprehensive display of pigment materials, talc, calcite and barytes, which should be of interest to the trade. The exhibit is in charge of J. C. Williams, manager of the development service of the Southern Railway system, Washington, D. C., assisted by Z. P. Smith, general industrial agent; Fred Jennings and H. H. Willhoit, assistant industrial agents, and Chas. A. Weller, consulting engineer, of Knoxville, Tenn.

Find a New Market: Booth 21

BLACKS OF SUPERIORITY

TO give the users of Binney & Smith Co. products the benefits of every advance in chemical research as applied to the perfection of black pigments, our chemists engage in constant and costly research. The work in our laboratories combined with unexcelled manufacturing facilities has made Binney & Smith Co. Blacks the Standard of the World.

If you would obtain uniform quality and best results, use Binney & Smith Co. Blacks exclusively. There's a grade for every purpose.

BLACKS OF SUPERIORITY

BINNEY & SMITH CO.

41 East 42nd St. **New York City**

CARBON BONE DROP IVORY OXIDE

You Must Know Market Trends

Daily fluctuations in prices of chemical and allied products take on a new and full significance when compared with the trend of the respective markets since the beginning in 1922 of the new era of industrial and commercial restabilization. This essentially useful analytical background is supplied in the

OIL, PAINT and DRUG REPORTER

Monthly Analysis of Market Trends

a series of universally comparable, fully interpreted, readily intelligible charts picturing general business conditions and fifteen typical individual products or closely allied groups in

HEAVY CHEMICALS - ORGANIC CHEMICALS
PAINTS - OILS - SOLVENTS - PETROLEUM

You cannot know your markets without this Analytical Guide.

See pages 44F to 45 of Part One of this (September 17, 1923) issue of the Oil, Paint and Drug Reporter.

GET A COPY AT BOOTH 21

Sowers Manufacturing Company, Buffalo, N. Y.

BOOTH 23.—Several different types of mixers are shown in operation. In charge are D. W. Sowers, president; H. B. Underwood, R. W. Diemer, H. J. Ruhf, S. H. Farkas and R. P. Waller.

Stedmans Foundry & Machine Works, Aurora, Ind.

BOOTH 267.—A motor drive disintegrator especially for pulverising dry colors, lithopone, linoleum colors and similar colors is the chief attraction. Chester A. Peeples, general manager, and S. D. Dean are receiving friends.

F. J. Stokes Machine Company, Philadelphia, Pa.

BOOTH 77.—Tablet machine in operation, powder filling machine also running, an automatic tube filling and closing machine, laboratory vacuum dryer and other equipment, as well as samples of compressed tablets of various sorts comprise the showing. Lawrence H. Bailey and Charles F. Coleman are in charge.

D. H. Stoll Company, Inc., Buffalo, N. Y.

BOOTH 209.—Steel barrels and drums are shown, and R. S. Fetter and W. H. Lautz are in charge.

B. F. Sturtevant Company, Boston, Mass.

BOOTHS 239 and 243.—Drying equipment and fans manufactured by the company are shown. Lucien Buck is in charge.

Swenson Evaporator Company, Harvey, Ill.

BOOTH 78.—Swenson-Walker two-deck continuous crystallizer and a model of the Yaryan evaporator are shown. In attendance are M. DeBeers, general manager; P. B. Sadtler, chemical engineer; Prof. W. L. Badger, Geo. T. Walker and C. E. Brown of Philadelphia; also J. R. Bates and Polderman from the New York office of Whiting Corporation.

C. J. Tagliabue Mfg. Company, Brooklyn, N. Y.

BOOTHS 275 and 276.—Recording and controlling pressure and temperature apparatus is shown. Automatic pressure control which assure uniformity are also to be seen.

Takamine Laboratory, Inc., New York City

BOOTH 547.—Electrical specialties which save time and labor are shown. Standardized polysime and new uses for this material are illustrated. The booth is in charge of Eben Takamine, J. Takamine, Jr., J. W. Coleman, Milton Tanner, Willard Newall, Alex MacKenzies, A. G. Heller and Matthew Casey.

Dye Demonstration

Actual laundrying tests of dyed fabrics will be performed daily during the exposition as a demonstration of the reliability and fastness of American dyes. This demonstration is under the direction of H. S. Kimberly, of the exposition staff, with the National Laundrymen's Association, the American Laundry Machine Co., and various textile mills co-operating.

If You Want to Find Out
Who Buys
Who Sells
Anything in the
Chemical and Allied Lines
Call at Booth 21

Exhibitors and Advisers To Meet

A meeting of exhibitors with the advisory committee of the National Exposition of Chemical Industries will be held Wednesday forenoon at 11 o'clock in the conference room, third floor. The importance of the matters to be discussed makes it imperative that every exhibitor be represented.

Tennessee Copper & Chemical Corp., New York City

BOOTHS 328 and 329.—Acid phosphate and mixed fertilizers, sulphuric, battery acids and niter cake and other products of the company and its subsidiaries are shown, while the exhibit is in charge of E. S. Howell, L. J. Pettett and L. J. Sonderlick, Jr.

Tennessee Eastman Corporation, Rochester, N. Y.

BOOTH 219.—All sorts of hardwood distillation products are on view, including methanol, acetone, acetone oils, acetate of lime, pitch and ethyl methyl ketone. Harry Seaman represents the company.

Texas Gulf Sulphur Company, New York City

BOOTH 11.—Sulphur products and photographs of plants in operation constitute the showing. Holland R. Wemple is in attendance.

Thermo Electric Instrument Company, Newark, N. J.

BOOTH 258.—Electric drying and vacuum ovens of various types as made by the company are shown and guests are being received by R. B. Freas and L. I. Roberts.

Tolhurst Machine Works, Troy, N. Y.

BOOTHS 68 and 96.—The Tolhurst Timer, which can be directly attached to any motor driven extractor, is the feature exhibit. Various extractors in operation are also shown. In attendance are R. K. Cheney, T. A. Bryson, W. C. Dutton, T. M. Stuart, John S. Gage, John McKeon and E. D. Rhodes.

Torsion Balance Company, New York City

BOOTH 538.—All sorts of balances for laboratory and other purposes which are made by the company are exhibited. The exhibition is in charge of A. T. Millroy, J. W. Wetz, K. W. Dunn and K. T. Tompkins.

Uehling Instrument Company, Paterson, N. J.

BOOTH 45.—The company exhibits various kinds of fuel economy equipment. Attention is attracted by the combustible gas recorder, showing accurately the amount of unburned gas escaping from a boiler or other industrial furnace. The exhibit is in charge of F. F. Uehling, C. C. Phelps, C. J. Schmid, A. C. Schmid, R. E. Terhune and W. Greacen 3d.

United Filters Corporation, New York City

BOOTH 53.—Continuous vacuum filter, Kelley filters and sample plates and frames for a United filter press are shown. Those in attendance are E. J. Sweetland, vice-president; J. T. Hoyt, assistant manager; R. C. Campbell and L. D. Thompson.

United Lead Company, New York

BOOTH 54.—"United" products made by the company are to be seen, mostly acid resisting equipment, such as gas generators, lead and tin-lined pipes and fittings, acid drums, autoclaves and storage tanks. The flanged acid valve is of great importance to the trade and attracts much notice. In attendance are H. F. Freiherr, J. W. Spotten, J. K. McElfish, J. W. Donnan, P. H. Taylor, O. Mantius and W. Simonson.

U. S. Testing Company, New York

BOOTH 254.—The exhibit consists of soaps, oils, greases, waxes, gasoline, toilet preparations, metals and alloys, paints, varnishes and shellacs, dyestuffs and intermediates, cement bags, burlaps, textiles and twines. Receiving guests are John Bell, Hubb Bell, A. A. Cook, W. F. Edwards, E. Kennedy, H. S. Mudge, Harold Holmes, A. E. Davieau, H. B. Gordon and Miss A. M. Graham.

U. S. Industrial Alcohol Company, Inc., New York

BOOTHS 326, 327, 330 and 331.—B. R. Tunison is in charge and the company displays absolute alcohol, ethyl acetate, ether and various other of its products.

Westinghouse Electric & Manufacturing Company, Pittsburgh, Pa.

BOOTH 46.—The articles exhibited are lamp flasher, electroplating panel, impregnated motor coils, chemical motor, exhaust and oscillating fans, meter diplay board, switches, auto starters, steel clad and cartridge heaters, tempering oven and air heater. In attendance are E. W. Loomis, G. A. Vaughn and E. J. Hegarty of the New York office and G. B. Gibson and P. H. Grunnagle of the head office.

York Metal & Alloys Co., York, Pa.

BOOTH 432.—The products of this concern made from the rarer metals, such as tungsten and molybdenum, will be exhibited.

Young Brothers Company, Detroit, Mich.

BOOTH 296.—The principal feature is a working model of a continuous conveyer baking oven. Also shown is a model of the company's standard laboratory oven.

Zeller Lacquer Mfg. Company, Inc., New York City

BOOTHS 269 and 272.—A comprehensive and diversified display of multitudinous articles finished with Zeller Lacquer Products, including polychrome finishes, metallic powder effects, also some unusual and unique finishes obtained by means of new grades of lacquer, leatherette and crackle effects, antique reproductions and wood finishes. Hugo Zeller, Richard Zeller, Gustave Zeller are receiving guests.

The Purpose of the Exposition

A Letter from the Management

Throughout the past eight years, the National Exposition of Chemical Industries has made a strong effort to gain the sympathy of the general public for the chemical industries. It is not by any means the intention this year to abandon this idea, because this is one of the features of the exposition through which the nation has benefited. This year the exposition is designed to be primarily of benefit to the industries through the manufacturers and their technical men, as well as to instruct and benefit bankers and financiers who are interested in learning more of the material side of those industries in which they are interested and are mostly conscious through the balance sheets.

In this respect we have the hearty co-operation of the exhibitors, who have distributed their tickets among persons in industries who will benefit by attendance at the exposition.

As a new departure, which is truly a development of work in the past, a course on the fundamentals of industrial chemistry and chemical engineering is being given to students who have had some preliminary training in colleges and universities. This course is being taken advantage of by some younger men already graduated and now employed in industry, to elaborate upon their college and industrial training. The course is in the hands of trained instructors and will comprise lectures, conferences, recitations and guided inspections of exhibits.

A number of other new features are introduced into the exposition in the way of educational exhibits. Some disclose full details of industries about which there has been much guess work.

The society programs are likewise considerably advanced in the new form in which they are presented this year. The motion picture program will also be of extreme interest, and a number of the forty or more industries which are served by the exposition will be visualized and find much inspiration in the films which will be shown.

The exhibits made by industrial and commercial firms this year may be expected to be superior to previous showings. A large number of these will comprise actual operations, and a great many will show new and novel developments of the past year or two.

There is no man connected with a business or industry who cannot find in the exposition much of prime importance to him, and the exposition should prove well worth the expense of time and energy in a careful study of it by any of these men.

NATIONAL EXPOSTION OF CHEMICAL INDUSTRIES,
Charles F. Roth, Manager.

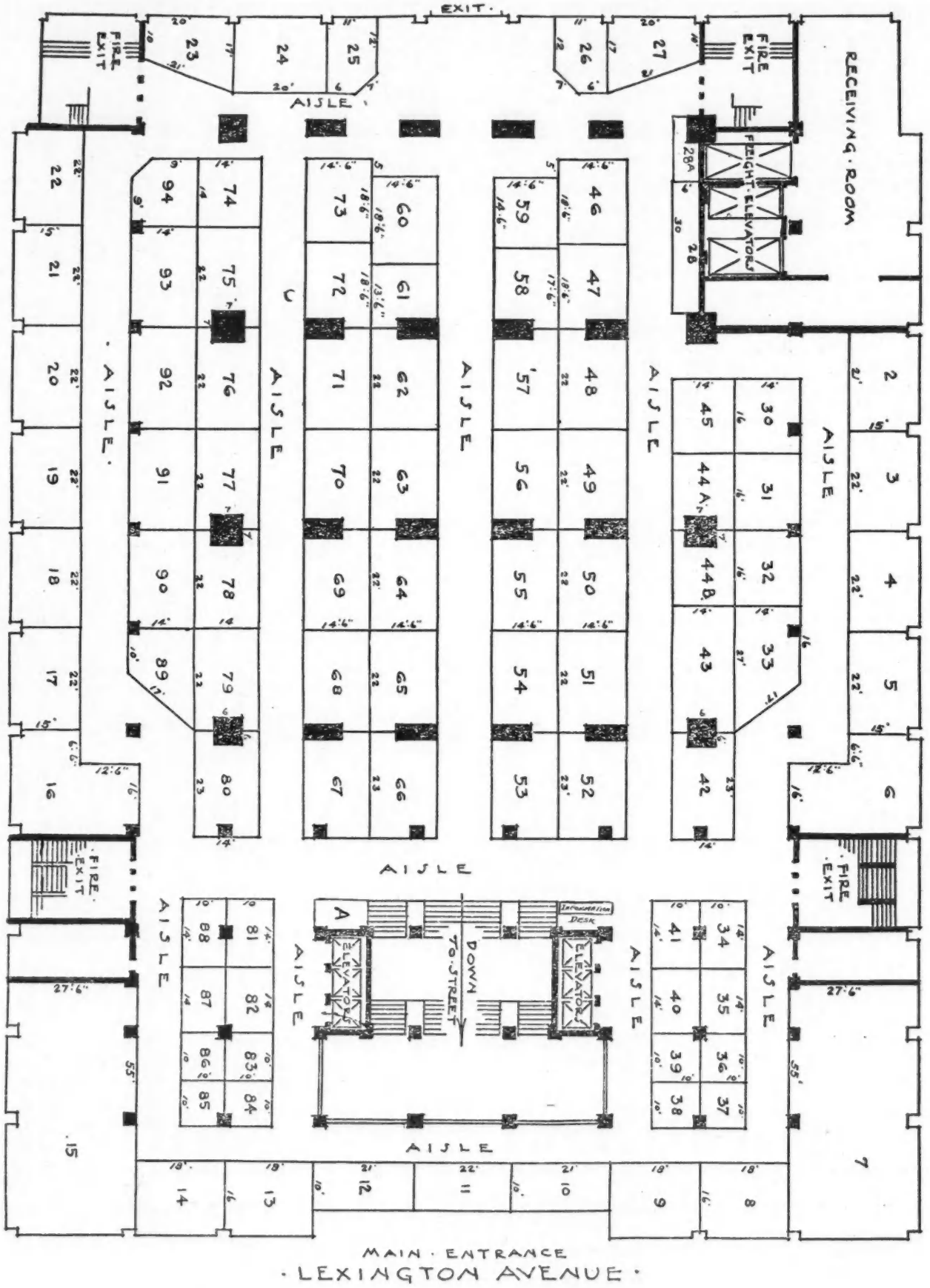

Diagram of Exhibit Spaces

First Floor

Find a New Market: Booth 21

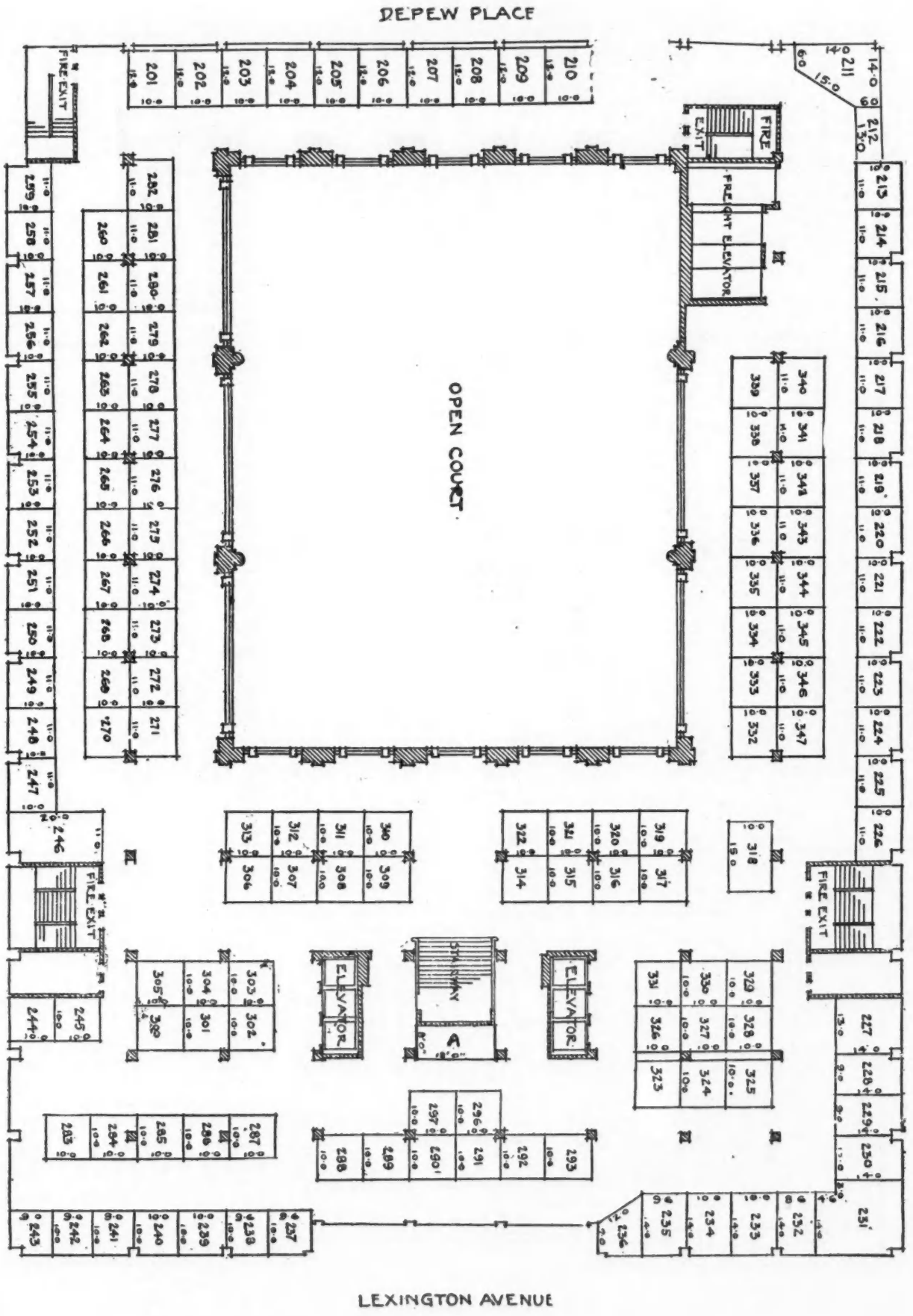

Diagram of Exhibit Spaces

Second Floor

Find a New Market: Booth 21

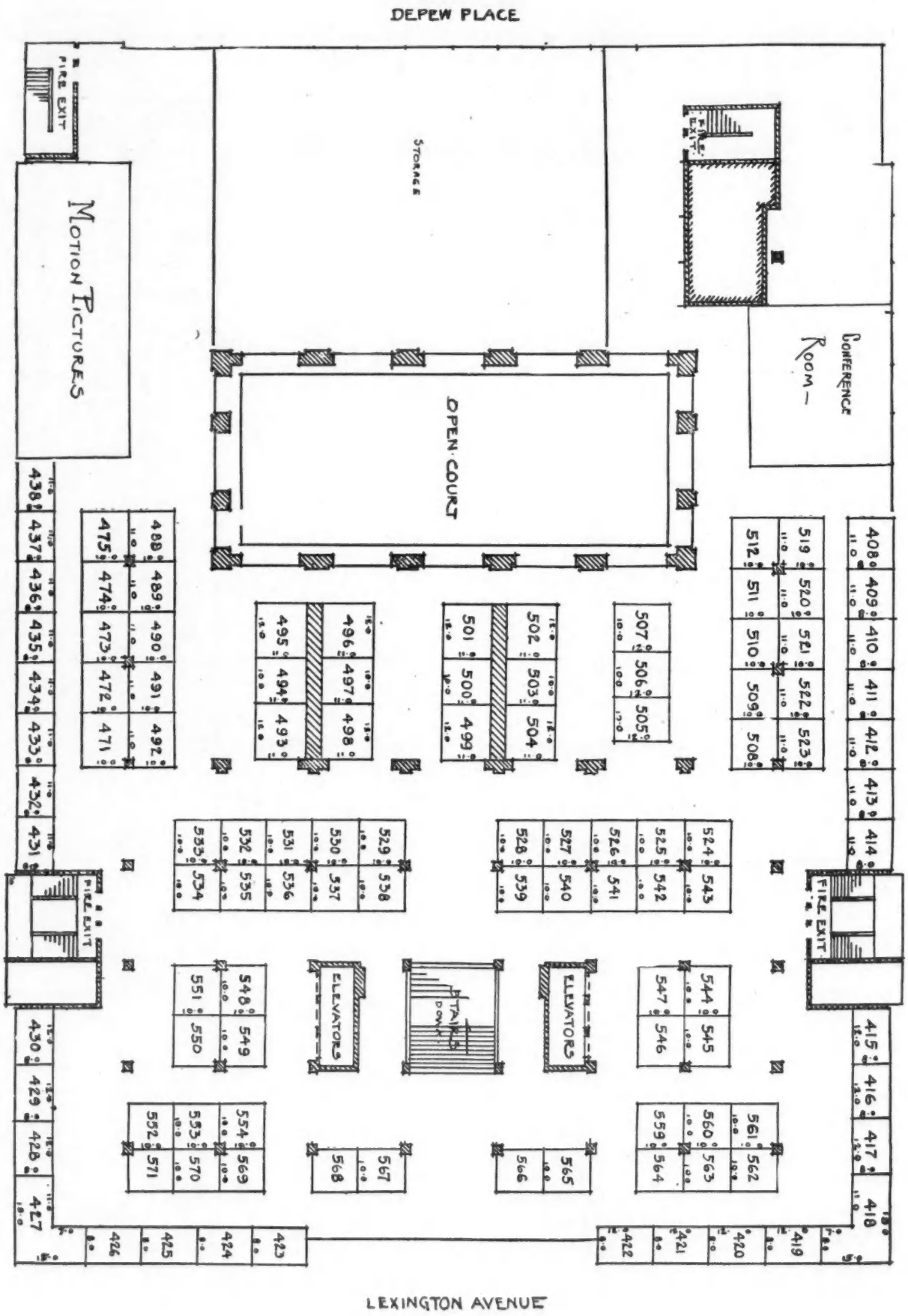

Diagram of Exhibit Spaces

Third Floor

Find a New Market: Booth 21

Dyes and Other Coal Tar Chemicals Imported Through New York in August

The dyes in this report are grouped by Schultz numbers and in the case of those which could not be identified by Schultz number, the classification, according to ordinary method of application, was adopted. As the pastes and powders of the vat dyes vary widely in strength and quantity, each vat dye has been reduced to a single strength basis.

The designation "c" for competitive and "nc" for noncompetitive in column one indicates the appraisement basis for the assessment of the ad valorem duty in paragraph 28 of the Tariff Act of 1922. Those dyes without designation are doubtful, pending further investigations.

The ad valorem rate for competitive dyes is based on the American selling price, as defined in subdivision (f) of section 402 of title IV.; the ad valorem rate for noncompetitive dyes is based on the United States value as defined in subdivision (d) of section 402 of title IV. of the Tariff Act of 1922.

The imports of color lakes for August totaled 4,057 pounds with an invoice value of $2,881. The imports of synthetic aromatic chemicals for August totaled 5,180 pounds with an invoice value of $11,402, and the imports of medicinals, photographic developers and other coal tar chemicals totaled 17,226 pounds with an invoice value of $24,404. Details of the August imports follow:—

Schultz No.		Name of dye.	Maker.	Pounds.	Invoice value.	Origin.	Per cent.
121		Erica B		100		Germany	100
		Erica B extra	A				
140		Curcumeine		4,178		Switzerland	100
	nc	Jasmine high conc. 729	G				
207		Diphenyl fast brown		1,984		Switzerland	100
	nc	Diphenyl fast brown GNC	G				
220		Palatine black		2,000		Germany	100
	c	Wool black GRF	A				
265		Sulphon cyanine black		4,400		Switzerland	100
	nc	Acid milling black B	G				
274		Diaminogene		2,156		Germany	100
	nc	Diaminogene extra	C				
283		Bismarck brown		40		Poland	100
		Bismarck brown	Q				
308		Diazo black		500		Germany	100
	nc	Diazo black OT	By				
319		Diamine scarlet		1,050		Germany	95
	nc	Diamine scarlet 3B	C			Switzerland	5
	c	Chloramine red 3B	S				
424		Chicago blue 6B		2,107		Switzerland	100
	c	Chloramine sky blue FF conc	S				
449		Trisulphon brown		4,409		Switzerland	100
	nc	Trisulphon brown B conc	S				
500		Setocyanine		1,997		Switzerland	100
	nc	Setopailine conc. 707	G				
503		Neptune green		2,605		Switzerland	85
	c	Erioviridine B supra	G				
	nc	Guinea fast green B	A			Germany	15
506		Erioglaucine		5,591		Switzerland	100
	nc	Erioglaucine AP 545	G				
515		Methyl violet		200		Germany	100
		Methyl violet NFB	B				
516		Crystal violet		2,000		Germany	100
		Crystal violet extra pdr	B				
		Violet crystals O	M				
524		Acid magenta		500		Germany	100
		Acid magenta	C				
543		Patent blue		110		Germany	100
	c	Patent blue V	A				
545		Patent blue A		330		Germany	100
	c	Patent blue A	A				
546		Cyanol		v30	$1,088	Germany	76
	nc	Cyanol extra	C			Italy	24
	nc	Cyanol FF	C				
	nc	Blue FF	C				
565		Acid blue B		300		Germany	100
	nc	Wool blue 5B	A				
571		Rhodamine 6G		8,386	26,369	Germany	99
	nc	Rhodamine 6G extra	B			Italy	1
	nc	Rhodamine 6GD extra	M				
	nc	Rhodamine 6GDN extra	B				
	nc	Rhodamine 6GDN extra conc	M				
573		Rhodamine B		1,897	3,734	Germany	82
	c	Rhodamine B extra	B			England	12
	c	Rhodamine B extra	Q			Italy	6
	c	Rhodamine B extra base	B				
606		Phosphine		440	638	Germany	50
	c	Phosphine G	By			Switzerland	50
	nc	Leather phosphine G	G				
	nc	Leather phosphine 2G	G				
608		Euchrysine		250		Germany	100
	c	Euchrysine GRNTN	B				
612		Quinoline yellow (spirit soluble)		100		Switzerland	100
	nc	Quinoline yellow (spirit soluble)	S				
613		Quinoline yellow (water soluble)		2,000		Switzerland	100
	c	Quinoline yellow (water soluble)	S				
618		Thioflavine T		550		Germany	100
	nc	Methylene yellow H	M				
	nc	Basic yellow T	C				
635		Modern violet		440		Switzerland	100
	nc	Modern violet	DH				
637		Gallamine blue paste		11,100		Switzerland	100
	nc	Gallamine blue extra paste	G				
653		Nile blue		400		Germany	100
		Danubia (Nile) blue BX	B				
663		New methylene blue		1,000		Germany	100
	nc	New methylene blue N	C				
672		Azocarmine		1,400		Germany	100
		Azocarmine GX	B				
679		Saframine		110		Switzerland	100
	c	Saframine superfine yellowish	G				
699		Induline (water soluble)		50		Germany	100
		Induline NN	B				
700		Nigrosine (water soluble)		1,264		Germany	95
		Nigrosine	Q			Poland	5
		Nigrosine T	B				
759		Anthraflavone		392		France	100
		Anthraflavone GC paste	Q				
760		Indanthrene golden orange G (single strength)		2,829	3,584	Germany	85
	nc	Indanthrene golden orange G paste	B			Italy	15
	nc	Indanthrene golden orange G powder	B				
761		Indanthrene golden orange R (single strength)		905	1,372	Italy	94
	nc	Indanthrene golden orange RRT pdr	B			Germany	6
	nc	Indanthrene golden orange RRTS pdr	B				
	nc	Indanthrene golden orange 3R paste	B				
762		Indanthrene scarlet GS (single strength)		208		Italy	100
	nc	Indanthrene scarlet GS pdr	B				
765		Indanthrene green B (single strength)		10,800		Germany	100
	c	Indanthrene black BB dbl. paste	B				
	nc	Indanthrene blue green B dbl. paste	B				
767		Indanthrene violet RR (single strength)		800		Italy	100
	c	Indanthrene violet RR pdr	B				
778		Alizarin synthetic		8,820		Germany	100
	c	Alizarin VI extra pure B	B				
780		Alizarin red		4,190	3,978	Italy	64
	nc	Alizarin red S pdr	B			Germany	36
	nc	Alizarin red W pdr	By				
	nc	Alizarin red S pdr	Q				
816		Algol red 5G (single strength)		472		Italy	100
	nc	Algol red 5G pdr	By				
820		Algol brilliant violet R (single strength)		1,984		Germany	100
	nc	Algol brilliant violet R pdr	By				
822		Algol brilliant orange FR (single strength)		1,027		Germany	59
			By			Italy	41
	nc	Algol brilliant orange FR paste					
827		Indanthrene claret B extra (single strength)		1,400		Germany	100
	nc	Anthra bordeaux R pdr	B				
	nc	Anthra bordeaux R paste	B				
828		Indanthrene claret B (single strength)		3,520		Italy	100
	nc	Indanthrene claret B pdr	B				
832		Indanthrene violet RN (single strength)		4,547	6,545	Germany	100
	nc	Indanthrene violet BN extra paste	B				
	nc	Indanthrene violet BN paste	B				
	nc	Indanthrene violet BN paste, fine	B				
	nc	Indanthrene violet BN pdr	B				
834		Algol gray (single strength)		396		Germany	100
		Algol gray 2B paste	By				
838		Indanthrene blue RS (single strength)		1,203		France	100
		Indanthrene blue RS triple pdr	Q				
840		Indanthrene blue 3G (single strength)		11,210	8,258	Germany	100
	c	Indanthrene blue 3G paste	B				
	c	Indanthrene blue 3G paste fine	B				
	c	Indanthrene blue 3G pdr	B				
841		Indanthrene blue GGS (single strength)		250		Germany	100
		Indanthrene blue 2GSNP quintriple pdr	B				
842		Indanthrene blue GCD (single strength)		2,000		Germany	100
	c	Indanthrene blue GCD dbl. paste fine	B				
853		Anthraquinone violet		220		Italy	100
	nc	Anthraquinone violet pdr	B				
855		Alizarin pure blue		146		Italy	100
	nc	Alizarin pure blue B pdr	By				
856		Alizarin astrol		330		Italy	100
	nc	Alizarin astrol B pdr	By				
858		Alizarin saphirol B		838	1,869	Switzerland	79
	c	Alizarin blue SAP	By				
	c	Alizarin light blue B conc	S			Italy	20
	c	Alizarin saphirol SE pdr	By			Germany	1
859		Cyananthrol R		110		Italy	100
	nc	Cyananthrol RXO	B				
860		Cyananthrol G		1,020		Germany	78
	nc	Cyananthrol BGAOO	B			Italy	22
861		Anthraquinone blue SR		200		Germany	100
	nc	Anthraquinone blue SR extra pdr	B				
862		Alizarin blue black		1,413		Germany	84
	c	Alizarin blue black B	Q			Italy	16
	c	Alizarin blue black B pdr	M				
864		Anthraquinone green		150		Germany	100
	nc	Anthraquinone green GXNO pdr	B				
869		Algol brown B (single strength)		441		Italy	100
	nc	Algol brown R paste	By				
873		Indanthrene pink		882		Italy	100
		Indanthrene pink B dbl. paste	B				
885		Brilliant indigo BD paste		2,460		Germany	100
		Brilliant indigo B paste	B				
902		Helindone brown 2R (single strength)		207		Italy	100
		Helindone brown 2R paste	M				
906		Ciba red G (single strength)		551		Switzerland	100
		Ciba red G paste	I				
907		Ciba scarlet (single strength)		440		Italy	100
	nc	Helindone fast scarlet C paste	M				
	nc	Thioindigo scarlet 2G paste	K				
908		Ciba red R (single strength)		1,102		Switzerland	100
	nc	Ciba red R paste	I				
911		Ciba orange G (single strength)		220		Switzerland	100
		Ciba orange G paste	I				
918		Helindone red 3B (single sertngth)		880		Italy	100
	nc	Helindone red 3B paste	M				
		Thioindigo red 3B paste	K				
923		Ursol		1,450	2,093	Germany	100
	c	Ursol DG	A				
	c	Ursol P	A				
	nc	Ursol brown 2R	A				
	nc	Ursol gray ALA	A				
		Ursol red brown 6R					

Unidentified Acid Dyes

	nc	Acid pure blue R supra	G	882		Switzerland	100
		Acid rhodamine BG	B	1,500		Germany	100
	nc	Acid red violet	Q	11		France	100
	nc	Acid silver gray	Q	22		France	100
	nc	Acid violet 7B purple	Q	22		France	100
	nc	Alizarine direct violet ER	B	100		Germany	100
		Alizarin rubinol		1,728	5,148	Italy	64
	nc	Alizarin rubinol GW pdr	By			Germany	36
	nc	Alizarin rubinol 5G pdr	By				
	nc	Alizarin rubinol R pdr	By				
	c	Azorhodine 2GN conc	S	500		Switzerland	100
	nc	Brilliant milling blue B	C	500		Germany	100
		Brilliant yellow conc	S	500		Switzerland	100
		Guinea fast red		4,300		Germany	100
		Guinea fast red BL	A				
	nc	Guinea fast red 2BL	A				
		Neolan blue		771		Switzerland	100
	nc	Neolan blue B	I				
	nc	Neolan blue 2G conc	I				
		Onis (anthosine)		700		Germany	100
	nc	Onis 3B	B				
		Onis 5B	B				
		Polar red		5,248		Switzerland	100
	c	Polar red G conc	G				
	nc	Polar red R conc	G				
	nc	Polar yellow 5G conc	G	2,205		Switzerland	100
		Ponceau	Q	2		Poland	100
	nc	Supramine yellow R	B	200		Germany	100

Unidentified Vat Dyes

		Algol brown G paste	By	165		Italy	100
		Hydron scarlet paste		960		Germany	89
	nc	Hydron scarlet 2B paste	C			Italy	11
	nc	Hydron scarlet 3B paste	C				
	nc	Hydron violet R (single strength)	C	275		Italy	100
		Indanthrene brown 3R paste	B	716		Italy	100
		Indanthrene orange 3R paste	B	600		Germany	100
		Vat violet BR paste	Gr-E	112		Germany	100

Unidentified Mordant and Chrome Dyes

	nc	Acid alizarin gray G	M	2,235		Italy	100
	nc	Alizarin fast gray 2BL	By	10		Germany	100
	nc	Chromanol blue NR	DH	220		Switzerland	100
	c	Eriochrome flavine A conc	G	1,904		Switzerland	100
	nc	Eriochrome green O	G	110		Switzerland	100
	nc	Metachrome blue black R	A	500		Germany	100
	nc	Omega chrome brown PB conc	S	3,873		Switzerland	100

Unidentified Direct Dyes

		Benzo fast blue FFL	By	220		Italy	100
	nc	Benzo fast brown 3GL	By	462		Italy	100
	nc	Benzo fast eosine BL	By	110		Germany	100
		Benzo fast gray BL	By	324		Germany	100
	nc	enzo rhoduline red 3B	By	154		Germany	100
	nc	Benzo fast violet BL	By	130		Germany	100
	nc	Benzo light brown 3GL	By	441		Italy	100
	c	Diamine fast gray NBN	MLy	2,205		France	100
		Diazamine black N extra	MLy	388		France	100
		Diazophenyl black V	G	2,205		Switzerland	100
	nc	Direct marine blue	Q	2		France	100
	nc	Good direct R	Q	2		France	100
		Naphthogene blue B	By	249		Germany	100
		Oxamine fast pink BX	B	125		Germany	100
		Triazol light blue 4GL pdr	Gr-E	280		Germany	100
	c	Zambesi black D	A	500		Germany	100

Unidentified Basic Dyes

		Brilliant acridine orange		330		Switzerland	100
	nc	Brilliant acridine orange 3R	DH				
	nc	Brilliant acridine orange 54	DH				
	nc	Dahlia violet	Q	11		France	100

Unidentified Spirit Soluble and Color Lake Dyes

		Lithol fast orange R pdr	B	2,000		Germany	100
		Typophor carmine FB	B	10		Germany	100
		Typophor yellow FR	B	200		Germany	100

Unidentified, Unclassified Dyes

	nc	Blue de France	Q	22		France	100
		Fast black LB base	Gr-E	1		Germany	100
	nc	Mandarin yellow	Q	2		France	100
	nc	Orseille red	Q	2		France	100
	nc	Reddish brown castor	Q	22		France	100

Color Lakes of Coal-Tar Origin

	c	Azure blue 315 BK	450	189		Germany	100
	nc	Azure blue 1137 K	1,000	200		Germany	100
	nc	Brown madder	22	61		France	100
		Carmine madder	203	704		France	100
	c	Crimson madder of alizarin	22	42		France	100
	c	Madder lake	1,000	920		Germany	100
	c	Permanent red	250	170		Germany	100
	c	Rose madder Y	110	195		France	100
		Viridine lake 1028 H	1,000	400		Germany	100

Synthetic Aromatic Chemicals of Coal-Tar Origin

	Amyl salicylate	205	134	Switzerland	97
				(?)	3
	Anisic aldehyde	50	114	France	100
nc	Benzophenone	22	43	Holland	100
c	Benzyl acetate	421	180	Holland	48
				France	52
c	Benzyl benzoate	508	256	Switzerland	79
				Holland	15
				France	6
	Benzyl formate	2.2	0.5	Germany	100
c	Coumarin	2.2	6	Holland	100
		4.4	15	France	100
nc	Cyclohexanol acetate	21.9	18	Switzerland	100
c	Diethyl phthalate	2.2	5	Holland	100
c	Heliotropin	64.4	191	Switzerland	78
nc	Methyl methylanthranilate			Germany	15
				France	7
		725	4,604	Switzerland	97
nc	Musk ambrette			Holland	3
nc	Muck ketone	50	317	Switzerland	100
nc	Musk P. C	2,103	2,832	Switzerland	100
c	Phenyl acetaldehyde			Switzerland	66⅔
				Holland	33⅓
c	Phenyl ethyl acetate	35	89	Switzerland	89
				Holland	11
c	Phenyl ethyl alcohol	502	1,318	France	50
				Germany	40
				Holland	10
		22	66	France	100
c	Phenyl ethyl alcohol extra	2.2	21	France	100
nc	Phenylbutyl alcohol	1.1	6	France	100
nc	Phenyl ethyl butyl	30	83	Switzerland	100
nc	Phenysol	331	795	Holland	100
c	Rose (for soap)				

(Continued on page 22)

Organic Chemistry at the Milwaukee A. C. S. Meeting

Further investigation of the properties of furfural, obtained from corncobs, has indicated, according to a paper by Mahood and Harris at the A. C. S. meeting, that a rich, brown dye can be made from this substance. The experiments of these authors may lead to the production of an entire series of dyes in which this material is used to replace others already in use and thus in a series of dyes entirely American both as to method and materials of manufacture.

The work of Bogert and Curtin and of Bogert and Slocum on perfume materials points out interesting developments in this field. Modifications of the structure of odorous compounds to give modifications in the odors produced are studied. In the first case they have worked on compounds in which the odors are almost completely removed from compounds by substitutions. In the other they have developed a compound with the odor of rose from one which had other odors. Their work may lead to quite new lines of substances for the production of synthetic perfumes.

Abstracts of the foregoing papers and others presented before the Division of Organic Chemistry at the meeting of the American Chemical Society at Milwaukee, last week, are given below:—

Uses of Acetylene in Synthesis

By J. A. Nieuwland

The evolution of acetylene in organic syntheses began with the introduction of catalytic agents to effect reactions. Some of the following important types of catalytic syntheses will be discussed:— A. The halogenation reactions, typified by (a) catalytic $AlCl_3$ reactions; (b) catalytic $SbCl_5$ reactions. B. Catalysis with mercury salts, as, (a) acetaldehyde, glacial acetic acid and acetone; (b) paraldehyde synthesis; (c) synthesis of ethylidine diacetate, acetic anhydride, formaldehyde and methyl acetate; (d) synthesis of acetals, and cyclic acetals; (e) synthesis of acetylene with aryl hydrocarbons; (f) synthesis of acetylene with phenols (bakelite), and the dinaphthylols; (g) synthesis with reacting substances in solution, aldehyde blue, and green, acridine and xanthene dyes. Quinaldine, indole, cinnamic aldehyde, nitro cinnamic aldehyde and indigo. C. Syntheses with Cu_2Cl_2, as, (a) divinyl acetylene, and derivatives (HCHO); (b) quinaldine and quinoline derivatives. General remarks on the possibilities of future progress in synthesis with C_2H_2 will be made.

Synthesis of New Bicyclic Nitrogen Ring

By S. M. McElvain and Roger Adams

A method for the preparation of a derivative of a new bicyclic nucleus containing a nitrogen atom common to both rings has been developed. The new nucleus has been called isogranatanine because it is isomeric with granatanine. The particular derivative especially investigated was ethyl benzoyl isogranatoline carboxylate, prepared by reduction of the ethyl granatonine carboxylate and subsequent benzoylation. The ethyl benzoyl isogranatolline carboxylate hydrochloride is isomeric with homococaine hydrochloride, and is a powerful local anaesthetic.

Recent Developments in the Chemistry of Arsphenamine

By Walter G. Christiansen

Arsphenamine, salvarsan, as prepared by the customary process, that is, reduction of 3-nitro-4-hydroxyphenylarsonic acid with sodium hydrosulfite is not a pure substance, but contains at least three impurities—two sulfur compounds and one oxide. The amounts in which these impurities are present and the toxicity of the product are dependent upon the experimental conditions existing during the reduction. By the use of various modifications of these reactions, these impurities may be largely eliminated, but since a product which is satisfactory for clinical use can be secured by the above reaction, there is no necessity of abandoning this process. The colloidal properties of arsphenamine have an important bearing on the toxicity of this substance.

Electronic Conception of Valence and Heats of Combustion

By Morris S. Kharasch

The paper concerns itself with the application of the notions developed in a previous paper to the explanation of a number of properties of organic compounds. Considered in this light the study of the heats of combustion furnishes us with a very powerful tool for the determination of the electronic structure of organic compounds. The heats of combustion of some 275 organic compounds calculated upon this basis agree very well with the values that have been determined experimentally.

Petroleum as a Chemical Raw Material

By B. T. Brooks

Petroleum is sometimes referred to as a rich mixture of raw materials which should yield a wide variety of chemical derivatives comparable with the large number of substances which have been prepared or manufactured from coal tar. The problem of isolating pure substances from petroleum is, however, quite different and for the most part yet unsolved. Our present chemical knowledge of the hydrocarbons in petroleum enables us to make a certain limited survey of what might be expected in the way of a chemical development of this raw material. In this discussion the problem is considered more from the standpoint of research in organic chemistry than from the standpoint of the more or less well known problems of the petroleum industry proper. The present discussion is limited more to an effort to indicate what organic chemists can reasonably expect to do with this raw material rather than to discuss any improvements or extensions in the application of petroleum products such as are now manufactured and utilized in the industries.

Alkylation of Primary Amines with Aluminum Ethoxide

By W. A. Lazier and Homer Adkins

Both aromatic and aliphatic amines (aniline, p-toluidine, n-pentyl amine, n-butyl amine) have been alkylated with aluminum ethoxide, isopropoxide, normal butoxide and isobutoxide at temperatures of from 275 deg. to 350 deg. to give secondary amines entirely uncontaminated with tertiary amines. The reaction of aluminum ethoxide and aniline has been most thoroughly investigated. A 90 per cent. yield of mono ethyl aniline has been obtained at 350 deg. in a sealed tube, 10 per cent. of the aniline remaining unchanged.

Ethylation of Aniline by Means of Diethyl Sulfate

By A. R. Cade

In the experimental work which forms the basis for this paper the reaction between diethyl sulfate and aniline has been studied. Varying mixtures of aniline-monoethyl aniline-diethyl aniline are prepared by varying the molecular ratio of the aniline and of the diethyl sulfate originally used in the reaction. The effect of the time and temperature of heating the reaction mixture has been studied. A method for preparing a high grade diethyl aniline, or a mixture of mono- and diethyl aniline free from unused aniline are recommended as a result of the data obtained.

Preparation of Simple Olefine Bromides

By C. E. Boord

The bromine addition products of ethylene, propylene, butylene amylene are easily and rapidly prepared in quantity by generating the olefine by the contact process and passing the gas counter-current to bromine or a solution of bromine in carbon tetrachloride in a special absorbing device. The products are purified by fractional distillation or if necessary fractional distillation under diminished pressure. Since the product is in contact with bromine for only a short length of time substitution is reduced to a minimum.

Modification of the Sandmyer Synthesis of Ntriles

By H. T. Clarke and R. R. Read

The standard method for the preparation of nitriles from aromatic amines suffers from the disadvantage that poisonous gasses are evolved at two stages in the process, namely, cyanogen during the formation of the cuprous cyanide and hydrocyanic acid during the reaction of this with the acid diazonium solution. It has been found possible to avoid both of these difficulties; firstly, by preparing the cuprous cyanide solution by dissolving cuprous chloride in sodium cyanide and, secondly, by neutralizing the diazonium solution before adding it to the cyanide. The intermediate addition products formed under these conditions are extremely unstable, rapidly evolving nitrogen below 0°, and decomposing almost explosively unless the mixture is well agitated, preferably in presence of a diluent such as benzene. The yields fully equal those obtained by the standard procedure.

Simplification of Gattermann Synthesis of Hydroxy Aldehyes

By Roger Adams and I. M. Levine

The Gattermann synthesis for the preparation of hydroxy aldehydes by the reaction of phenols, anhydrous hydrogen cyanide and dry hydrogen chloride in dry ether, sometimes with the addition of anhydrous zinc chloride, gives excellent yields of products. The method is not as frequently used as might be expected, owing to the necessity of handling anhydrous hydrogen cyanide. The synthesis has been modified in such a way that this has been avoided. In place of the hydrogen cyanide, zinc cyanide is used, which is converted into anhydrous zinc chloride and anhydrous hydrogen cyanide in the reaction mixture. The zinc cyanide is readily prepared by treating an aqueous solution of sodium cyanide with magnesium chloride in order to precipitate the carbonate and hydroxide present, filtering and adding an alcoholic solution of zinc chloride. The precipitated zinc cyanide is filtered and dried. Experiments have shown that in several types of reactions anhydrous hydrogen cyanide has been previously employed, zinc cyanide may be substituted.

Synthesis of Esters of Chloroximino Acids

By Glenn S. Skinner

In attempting to obtain evidence of the existence of aliphatic diazonium salts by working at low temperatures using esters of glycocoll in the presence of a large excess of hydrochloric acid the esters of chloroximino acetic acid were found to be the chief product. These compounds by treatment with sodium carbonate give good yields of the corresponding nitrile oxides or their polymers. A comparatively small amount of the esters of chloracetic acid is also formed. The possibility that the chloracetic ester is first formed and then oxidized to the chloroximino ester has been eliminated by the fact that it remains unchanged when subjected to similar conditions. A second explanation of the reaction is that the diazo ester is first formed and this then reacts with the elements of nitrosyl chloride from the excess hydrochloric and nitrous acids present. However, the diazo ester was shown to give none of the substance when treated with nitrosyl chloride. A study of the molecular weight of the nitrile oxide in four different solvents shows that it is an equilibrium mixture of the monomolecular form and the dimolecular form the so-called furoxandicarboxylic ester. The yield of the chloroximino compounds varied from 50 to 80 per cent. of the theoretical.

Sodium Amalgam as a Reducing Agent for Oximes and Aldehydes

By L. Chas. Raiford and E. P. Clark

When sodium amalgam is prepared from pure mercury in accordance with the directions of the authors (J. Am. Chem. Soc., 45, 1740 (1923) and used as specified, it is found to be a suitable agent for the reduction of certain oximes to the corresponding amines. Contrary to the results of Goldschmidt and Ernst (Ber., 23, 2740 (1890)) who found that only a poor yield of amine could be obtained by reduction of salicylaldoxime with sodium amalgam, although they tried several modifications of the method, we obtained a yield of 96 per cent. When salicyaldehyde was employed under similar conditions, with the exception that the liquid was kept faintly acid with acetic acid during the reaction, a yield of over 90 per cent. of the corresponding alcohol, saligenin, was obtained. The highest yield we have found reported in any other case is 63 per cent. Several other examples are being studied.

Tertiary Butyl Alcohol

By Roland R. Read and F. A. Prisley

Isobutylene, prepared by the catalytic dehydration of isobutyl alcohol, is passed into a light petroleum distillate kept at a temperature below —10 deg. The saturated solution is agitated vigorously with 50 per cent. sulphuric acid, the temperature being allowed to rise slowly to that of the room. The aqueous layer is separated and neutralized. Tertiary butyl alcohol is then distilled out and dried.

Phenyl-Hydrazine for Preparation of Derivatives of Benzo-Pyrrol

By E. C. Kendall and A. E. Osterberg

The use of phenyl-hydrazine for the preparation of indol derivatives has long been known. Reduced benzo-pyrrol derivatives can be prepared by treating phenyl-hydrazones of cyclo-hexanone and its derivatives. To prepare members of the alpha-oxybenzo-pyrrol series, the derivative of cyclo-hexanone must contain a side chain of two carbons terminating in a carboxyl adjacent to the ketone group, such as ortho-cyclo-hexanone acetic acid. If the hydrazone of ortho-cyclo-hexanone acetic acid is treated with acids, it will lose ammonia, producing a double bond within the ring, and will form the phenyl derivative of the open ring form of alpha-oxy-benzo-pyrrol. Derivatives in which a side chain is attached to the beta carbon of the benzo-pyrrol nucleus have also been prepared. The properties of these compounds depending upon the position occupied by the double bond will be discussed.

Oxidation of Sucrose, Glucose and Fructose

By C. D. Looker and W. L. Evans

Sucrose and an equivalent mixture of equal parts of glucose and fructose were oxidized by means of potassium permanganate at 50 deg., 75 deg. and 100 deg. C. In neutral solutions, carbon dioxide and acetic acid were obtained upon complete oxidation. In potassium hydroxide solutions of varying concentrations at 50 deg. and 75 deg., oxalic acid was also obtained and increased in quantity up to about O.1N alkalinity and then decreased, but at 100 deg. the amount of oxalic acid increased again beyond 1.ON alkalinity. As oxalic acid increased, carbon dioxide always decreased proportionally. Acetic acid was nearly constant under all conditions.

Derivatives of the Beta-Chlorovinyl Arsines

By W. Lee Lewis and H. W. Stiegler

In addition to previously reported derivatives, the following have been isolated in the pure state: Beta-chloro-vinyl arsine sulphide; bis-beta-chloro-vinyl arsine sulphocyanate: tris-beta-chloro-vinyl methyl arsonium iodide: double salt of tris-beta-chloro-vinyl methyl arsonium iodide and mercuric iodide; double salts of tris-beta-chloro-vinyl arsine and silver nitrate with (a) 1 mole arsine and 1 mole $AgNO_3$ and (b) 2 moles arsine 1 mole $AgNO_3$; double salt of tris-beta-chloro-vinyl methyl arsonium iodide and phenyl mercuric iodide.

Arsenoacetic Acid and Its Polyarsenide

By C. Shattuck Palmer

Hypophosphorous acid reduction of arsonoacetic acid, $H_2O_3As.\ CH_2.\ COOH$, leads to arsenoacetic acid, HOOC. $CH_2As{=}AsCH_2COOH$, yellow needles, which decompose above 200 deg., but do not melt. The product is practically insoluble in water and common organic solvents, but readily soluble in pyridine and dilute aqueous alkali hydroxides and carbonates. Simultaneous reduction of one mol. As_2O_3 and two mols arsonoacetic acid gives the polyarsenide. HOOC. CH_2. As=As—As=As. CH_2. COOH. bright verimilion microcrystalline powder, resembling the simple arseno compound in solubilities and behavior on heating. The sodium salts of arsenoacetic acid and its polyarsenide are the first known water-soluble aliphatic derivatives of the arseno and polyarseno linkages.

Action of Beta Chloro-Ethyl-Chloroformate on Amino-Arylarsonic Acids

By Cliff S. Hamilton

The interaction of beta-chloro-ethyl chloroformate, prepared from ethylene chlorohydrin and phosgene, and amino-arylarsonic acids results in the formation of arsonated beta-chloro-ethyl carbanilates. These, in turn, give arsonated oxazolidones on treatment with alkali. The arsonated oxazolidones on further treatment with alkali yield, in some cases at least, arsonated N-arylamino alcohols.

Addition of Mercuric Salts to Unsaturated Ketones

By Edmund B. Middleton

Unsaturated ketones reacted with alcoholic solutions of mercuric acetate. Ketones with one double bond like benzalacetophenone gave products whose composition is expressed by ketone plus —$HgOOOCH_3$ plus —OR while dibenzalacetone gave products with two —$HgOCOCH_3$ and two —OR. They are alpha - acetoxymercuri - beta - alkoxy ketones. If mercuric halides were used instead of mercuric acetate colored compounds consisting of one molecule each of ketone and mercuric halide resulted. The white products obtained with mercuric acetate gave reactions similar to those obtained from olefines: decomposition with acids, etc. With bromine, the mercury was replaced and alpha-bromo-beta-alkoxy ketones resulted, for example, alpha-bromo-beta-methoxybeta-phenyl propiophenone from benzalacetophenone. This lost HBr with alkali and the resulting unsaturated ketone reacted further with mercuric acetate to give diacetoxymercuri-dibenzoyl methane. On acidification, dibenzoyl methane was obtained.

Preparation of Mercury Diphenyl

By J. Lewis Maynard

Direct mercuration offers the simplest method of obtaining derivatives of the type C_6H_5HgX. However, the method has heretofore been inpracticable because of the very low yield of desired product. Since acetic acid formed in the reaction $C_6H_6 + Hg(OAc)_2 = C_6H_5HgOAC + HOAc$ apparently prevents more complete forward reaction, HgO was added to neutralize the HOAc as rapidly as it formed. Based on the quantity of $Hg(OAc)_2$ used, the theoretical yield of C_6H_5HgOAc was obtained by refluxing the three reactants for 55 hours. $Hg(C_6H_5)_2$ may be obtained from C_6H_5HgOAc by heating it under pressure to 140 deg. with alkaline sodium stannite solution.

Unsymmetrical Mercuri-Organic Derivatives

By Morris S. Kharasch and Mildred W. Grafflin

The number of unsymmetrical mercuri-organic derivatives, of the type $RHgR_1$, recorded in the literature is limited to a few instances. The compounds are also claimed to be extraordinarily unstable and to decompose into two symmetrical molecules. The writers have evolved a method of preparing unsymmetrical mercury derivatives. Those prepared, thus far, are stable even at 200 deg. and do not decompose into two symmetrical molecules. The decomposition of these molecules with acids should throw considerable light upon the nature of linkage of the mercury and the carbon atoms of the respective molecules.

Chemistry of Furfural

By S. A. Mahood and C. R. Harris

Furfural can be substituted for benzaldehyde to give condensation products with amines analogous to the derivatives of tri-phenyl-methane. When meta-phenylene-diamine is used tetra-amine-ditolyl-fury-methane is obtained. This yields, with hydrochloric acid under pressure, dihydro - diamino - dimethyl-furyl-acridine hydrochloride which on oxidation gives a new dye, the furfural analog of benzoflavine. It is a typical acridine dye; gives to silk, wool, and unmordanted cotton a rich brown color and in fastness and stability is indistinguishable from its analog. Contrary to the work of O. Fischer but in accordance with that of Renshaw and Naylor, the substitution of the furyl for the phenyl group in dyes does not appear to render them less stable.

Polymorphic Forms and Thermotropic Properties of Schiff's Bases

By Raymond M. Hann

A review of the previous work on the effects of actinic light, trituration and heat upon the color changes of the para hydroxy anils. Discussion of the theories for explaining these physical changes bringing in mention of the Hantzaen Werner theory of molecular rearrangement, the molecular aggregation hypothesis and the possibility of stereoisomeric forms. Finally, the effect of the introduction of a negative radical in the benzylidene group upon the polymorphic and thermotropic properties.

Ketenic Decomposition of Ketones

By Charles D. Hurd

Ketene was produced, not only from acetone, but also from methyl ethyl ketone and diethyl ketone when their vapors were passed through an electrically heated platinum coil in a partial vacuum. In addition, methyl ketene was obtained in small yields from methyl ethyl ketone and from diethyl ketone. High temperatures, apparently, decompose methyl ketene with the resultant production of ketene. Acetone and methyl ethyl ketone formed very small amounts of liquid condensation products. Much of the diethyl ketone, however, was changed to higher boiling material.

Addition of Nitrogen Trichloride to Unsaturated Hydrocarbons

By G. H. Coleman and Elizabeth Pickering

Nitrogen trichloride adds to beta-n-amylene, alpha-n-amylene, and cyclohexene with the formation of C-chloro-N-dichloroamines. By the action of conc. HCl these amines are changed to C-mono-chloroamines. The C-chloroamine obtained from Beta-N-amylene was reduced by sodium amalgam to the corresponding amyl amine.

Nitrophenols and Nitrodiphenyl Ethers

By F. W. Sullivan, Jr.

Tetranitrodiphenyl ether 2, 4, 2', 4' was obtained in 90 per cent. yield by the reaction between 2, 4 dinitrochlorbenzol and the potassium salt of 2, 4 dinitrophenol. On nitration with $NaNO_3$ in 50 per cent. fuming sulfuric acid, this yelds 2, 4, 6, 2', 4' pentanitrodiphenyl ether, which melts at 205 deg. The constitution of this substance was proved because of its identity with the product obtained by the reaction between picryl chloride and the potassium salt of 2, 4 dinitrophenol. A small amount of a hexanitro compound melting at 258 deg. is also obtained at the same time. This is believed to be the hitherto unknown anhydride of picric acid, but its constitution has not yet been proved. In connection with this work improved methods for the preparation of o-nitro-phenol and 2, 6 dinitrophenol have been developed.

Derivatives of Para-Nitrobenzaldehyde hyde

By C. G. King and Alexander Lowy

Para-nitrobenzaldehyde was condensed with the following aromatic amines, forming "Schiff bases": O-nitroaniline, 2,6-dibromoaniline, 2,4,6-tribromoaniline, o-bromoaniline, m-bromoaniline, 3-bromo-4-toluidine, and p-xylidine. The first three would not condense satisfactorily in alcohol or glacial acetic acid, but did condense on direct fusion. Reduction of the nitro group on condensation products of the above type yielded unstable products. Dimolecular condensations were carried out with p-nitrobenzaldehyde and the following compounds:—Phenol (tetra-brominated and acetylated), resorcinol (dibrominated), thymol (dibrominated and benzoylated), o-nitrophenol and o-methyl anisole. In each case, bromination increased the depth of color. Oxidation of the phenolic products gave compounds analogous to the aurine dyes.

Electromotive Force of Unsaturated Hydrocarbons

By S. Borenson and D. J. Brown

The observed potentials at 25 deg. C. against the normal calomel electrode were $+0.09-0.03 \log (C_2H_4)(H\div)$ for ethylene. Ethylene bromide and glycol seemed to have little or no effect on the observed potentials.

Composition of Whale Oil

By C. H. Milligan, C. A. Knuth and A. S. Richardson

The composition of whale oil has been studied by fractionally distilling the methyl esters of the solid, liquid, and mixed fatty acids of the raw oil and also the methyl esters of the fatty acids of the hydrogenated oil. Whale oil, like other marine animal oils, contains a complicated mixture of fatty acids of carbon content varying from 14 to 22, probably with a small amount of C_{24} acids. The highly unsaturated acids are chiefly of 20 and 22 carbon content.

Orthoquinones

By Leonard T. Capell and C. E. Boord

The substituted catechols were prepared by the action of potassium persulfate on para substituted phenols. The catechols were oxidized by the Willstatter method using dry silver oxide. The methyl, ethyl, terbutyl, teranyl and monochloro substituted derivative of a benzoquinones were prepared. The absorption spectra of the green, red and yellow forms of these quinones were photographed and compared. All forms show the same absorption in dilute solution.

High Temperature in the Decomposition of Anthraquinone

By H. F. Lewis and Sherman Shaffer

The action of dry heat and steam at atmospheric and elevated pressures has shown that there is a definite point beyond which anthraquinone begins to decompose rather rapidly. These upper temperature limits of stability approach 450 degrees with an air pressure of 35 pounds, 400 degrees with a steam pressure of 35 pounds, and 375 degrees with a pressure of 30 pounds of oxygen. A temperature of 500 degrees decomposes anthraquinone at such a rate that at the end of eight hours approximately 80 per cent. of the original anthraquinone has been decomposed. A study has been made of the decomposition products which shows that there are at least two new substances produced—one extremely stable and the other very unstable. The stable substance being of the nature of hydroxi-anthraquinone and the unstable substance indicating the condensation of two or more molecules of anthraquinone.

Action of Acetylene on Phenols

By Herman Wenzke and J. A. Nieuwland

Acetylene in the presence of sulfuric acid and a mercury salt readily condenses with phenols to form ethylidene compounds. As in the case of ordinary phenol the position of linkage is usually para whenever that position is unoccupied. The tendency to form an aromatic acetal is slight, B-naphthol being the only compound tried that reacts in that way. The reaction with acetylene continues even after the theoretical quantity of 1 mol. of acetylene to 2 mols. of phenol has been absorbed. A tarry, resinous body is formed when an excess of phenol is absorbed. The presence of negative groups in the benzene ring as NO_2 SO_2OH, COOH prevented the reaction with acetylene. The phenol ethers, anisol and phenetol, do not react with acetylene. Most of the condensation products polymerized on heating or on long standing to form an insoluble body.

Synthesis of Aspartic Acid

By Glenn S. Skinner and Harry E. Carswell

A study of the conditions affecting the yield of aspartic acid has been made in its production from maleic and fumaric acids by the action of ammonia. The reaction has been carried out at temperatures of 100 deg., 109 deg., 117 deg., 125 deg. and 137 deg. for periods of time ranging from five to more than a hundred hours. The temperature range 110 deg.-125 deg. is most satisfactory. The optimum PH value for the precipitation of the aspartic acid was found to be 4.5. The conditions employed by Emil Fischer and by Engel were found to be unsatisfactory and it has been found possible to increase the yield to 70 per cent. of the theoretical. The melting point of the pure acid is 215 deg.-217 deg. in a closed tube.

Oxidation of Sugars

By Fred W. Upson and M. H. Power

Glucose has been oxidized by air in the presence of saturated lime water. The oxidation is slower than in the presence of more concentrated alkali as used by Nef, but the products are qualitatively the same. Formic, d-arabonic, d-erythonic, glycollic, oxalic and carbonic acids are among the oxidation products. Experiments on the speed of oxidation of glucose and fructose in the presence of six equivalents of NaOH have been carried out. Glucose and fructose oxidize at practically the same rate. The rate is no faster with oxygen under two atmospheres pressure than it is with air at atmospheric pressure.

Oxidation of Maltose

By W. L. Evans and M. L. Wolfrom

Maltose is oxidized by neutral permanganate solutions at 50 deg. to acetic and carbonic acids. In alkaline solutions oxalic acid is also an oxidation product in addition to acetic and carbonic acids. The oxalic acid production reaches a maximum at about O. 1 N alkali, while the carbon dioxide reaches a minimum at about this point. At higher alkalinities the oxalic acid diminishes in amount to a small degree, while the carbon dioxide increases.

Oxidation of Propylene Glycol

By E. C. Hytree and W. L. Evans

When propylene glycol is oxidized in potassium permanganate solution at 0 deg., lactic acid is obtained as one of the oxidation products, in addition to acetic and carbonic acids. Evidence was also obtained for the presence of lactide in the reaction mixture. From a consideration of the possible oxidation mechanisms it is highly probable that lactic aldehyde is an intermediate compound in the formation of lactic acid under these experimental conditions.

Relation Between Molecular Structure and Odor in Tri-Substituted Benzenes

By M. T. Bogert and L. P. Curtin

Tri-substituted benzenes carrying three osmophores in 1:3:4 arrangement are not always odorous, even when sufficiently volatile. Although 4-methoxy-acetophenone itself is a perfume substance, the introduction of the osmophores NO_2,NH_2,N_3 or CN, in position 3, results in odorless products. Certain new hypotheses are advanced concerning steric hindrance. The following new compounds are described: the 3-sulfo, 3-amino, 3-acetamino, 3-p-nitrobenzal amino, 3-iodo, 3-iodochloride, 3-iodoso and 3-cyano derivatives of 4-methoxy-acetophenone; and from the 3-amino, the corresponding diazo perbromide, azido, diazoamino and aminoazo derivatives; also the 3-iodoso-4-hydroxy-acetophenone. Some improved methods of preparation have been developed for compounds previously known.

Synthesis of New Rose Alcohols

By M. T. Bogert and E. M. Slocum

Iodohydrin acetates were condensed with sodio acetoacetic ester at 0 deg., the products hydrolyzed to the keto alcohols, and the latter subjected to Barbier-Grignard reactions, the primary-tertiary glycols first formed losing water with production of the desired olefin alcohols. Dimethyl - hexenols, - heptenols, - octenols, etc., were thus obtained from acetopropanol, acetobutanol, etc. Some of these products have fine rose-like odor. The odor of others is more of cedar oil type. Various new intermediates were synthesized in the course of the investigation, and some old methods of preparation were improved so as to give greatly increased yields.

Methylation by Means of Dimethyl Sulfate

By H. F. Lewis

Mass relationships have been studied in the methylations of the phenolic hydroxyl groups. Attempts have been made to develop a procedure for the utilization of the second methyl group in dimethyl sulfate. To a certain extent this has been accomplished.

Condensation Reaction

By Fred W. Upson

Certain points relative to carrying out the following reactions are discussed: (1) Reactions involving benzyl cyanide; (2) Reactions between aniline and chlorohydrins; (3) Addition of HCN to sugars.

Hydrolysis of Esters and Ethers of Chlorine and of Its Analogs

By R. R. Renshaw and N. Bacon

Dale has advanced the hypothesis that the extraordinary activity of acetyl chlorine and the evanescence of its action when compared with its ether and other esters may be due to the rapid hydrolysis of the former. The rates of hydrolysis of acetyl chlorine, the methyl ether of formochlorine, acetyl formochlorine and the acetyl derivative of the sulfur analog of formochlorine have been studied at the temperature and hydrogen potential of blood. The preliminary experiment would seem to negative the suggestion of Dale.

Decomposition of Benzyl Ethyl Ether Air

By Ralph C. Huston

Benzyl ethyl ether appears to be less stable in air than the simple dialkyl ethers, the aryl alkyl ethers or the diaryl ethers. Its decomposition apparently involves the formation of benzaldehyde, which is further oxidized to benzoic acid. These changes take place when the pure ether (B. P. 185 deg.) is allowed to stand for several weeks in an ordinary ground glass stoppered bottle. A small amount of the ether when placed on a watch glass and allowed to stand over night deposits crystals of benzoic acid. Benzyl alcohol is not oxidized under similar conditions. Since benzyl alcohol and acetaldehyde were not found in the decomposition products, it appears the CH_2 group between the oxygen and phenyl group is the main point of attack. The effect of ether alkyl groups on the stability of the CH_2 between the oxygen and phenyl group is being studied.

Fertilizer Chemistry at the Milwaukee A. C. S. Meeting

Four interesting papers, presented before the Leather Chemical Division of the American Chemical Society at the meeting at Milwaukee, last week, are abstracted below:—

Sulphur in Soil Improvement and Crop Production

By J. G. Lipman

The change of soil reaction caused by applications of sulphur has been studied. The factor of soil texture and composition, as well as the crop factor, in their relation to excessive applications of sulphur have been investigated. Marked variations as to soil type and crop have been found. Experiments are in progress at the New Jersey Station on the value of mixtures of inoculated sulphur and ground phosphate rock as compared with equivalent applications of acid phosphate. As a rule the results thus far secured have been in favor of acid phosphate. Interesting differences have been established. The production of acid phosphate by mixing inoculated sulphur with ground phosphate rock has been further studied and the method of production substantially improved. Soils containing an excessive accumulation of alkali salts have been treated with applications of sulphur and improved to a point where crop growth has again been made possible.

Separation and Determination of Potassium and Sodium

By Frederick Smith

The perchlorate method for the separation and determination of potassium in presence of sodium is quite generally employed, substituting for the chloroplatinate process. The perchlorate method now current has two distinct disadvantages. It is based upon the naturally inefficient extraction process, and requires absolute ethyl alcohol. In the proposed method, both these defects are eliminated. Normal butyl alcohol as purchased in bulk, substitutes for absolute ethyl alcohol. For avoiding the extraction process a warm saturated solution of potassium perchlorate with sodium perchlorate is treated with a comparatively large volume of the alcohol in order to precipitate potassium perchlorate. The proposed method is best adapted to the direct determination of potassium obtaining sodium as is generally done by difference. The method lays claim to speed, accuracy, and convenience. All pertinent solubility data and experimental applications using synthetic mixtures are given.

New Method for Available Nitrogen In Fertilizers

By James W. Kellogg

Since present methods of determining available nitrogen in fertilizers are not entirely satisfactory, a new method is greatly desired which will be simple, economical to use, and capable of adoption by officials in all sections of the country, as well as by manufacturers. Considerable study has, therefore, been devoted to this problem, and experiments have been made by using oxalic acid as a medium or the basis of a new method. This method consists briefly of a tentative strength of one hundredth normal solution of oxalic acid in a 100 cc., of which the residue of one gram of fertilizer, after having washed out the water soluble nitrogen to the extent of a 250 cc. filtrate, continued for fifteen minutes. The residue thus obtained, after washing out the material acted upon by the oxalic acid treatment, is analyzed for its nitrogen content, this figure deducted from the total, and the difference called "available nitrogen." Some interesting results have been secured with it.

Milwaukee to Make Ammonia Base Fertilizer from Sewage and Industrial Wastes

By V. H. Kadish

An illustrated description of Milwaukee's activated sludge sewage disposal process showing how the raw material (75,000,000 gallons daily of sewage and trade wastes) will be treated to produce a highly purified effluent and about 100 tons daily of dried, ground ammonia fertilizer material. A detailed account of the methods to be used in concentrating, dewatering and drying the activated sludge to a marketable condition. A brief discussion concerning the nature and value of the resultant base fertilizer material.

Medical Chemistry at the Milwaukee A. C. S. Meeting

A paper presented at the A. C. S. meeting by F. K. Thayer on "Butesin Picrate," appears to point the way to a new possibility in the treatment of burns, particularly, and abrasions of the skin by a combination of antiseptic and anesthetic action. J. W. Howard and F. D. Stimpert offer a new possibility in the antiseptic field, with a disinfectant that, rated on its toxicity to one of the ordinary pus forming bacteria, was found to be quite efficient.

Further study of insulin, used in the treatment of diabetes, was treated in a paper by H. A. Shonle and J. H. Waldo, who have made a chemical study of this substance and their results indicate its close likeness to protein compounds. Perhaps this study will later lead to efforts to synthesize the material, or to sources other than the pancreas, as at present.

Abstracts of these and other papers presented before the medical chemistry division of the American Chemical Society at the meeting at Milwaukee last week are given below:

Butesin Picrate

By F. K. Thayer

Butesin picrate is the picric acid salt of butyl para-aminobenzoate. There is combined in a definite chemical compound both antiseptic and anesthetic action. In an aqueous solution with a concentration of 1 part in 1400 it produces immediate and complete anesthesia upon the eye, which lasts from ten to twenty minutes. It exerts antiseptic action and, in many cases, germicidal action against various common bacteria, in concentrations of 1:400 to 1:800.

Butesin picrate is non-toxic and not irritating to the most sensitive surfaces. Incorporated into an ointment, it is useful in the treatment of painful, denuded skin areas, particularly in cases of burns.

Vitamin Potency of Cod Liver and Hake Liver Oils

By Arthur D. Holmes

To secure data concerning the relative vitamin potency of cod and hake liver oils, tests were made of hake liver oil known to be true to name. Nine young albino rats were given hake liver oil in amounts varying from .00025 grams to .005 grams daily.

Four animals received less than one milligram of oil daily and failed to recover from vitamin A starvation.

Five animals received from one to five milligrams of hake liver oil daily and recovered, indicating that one milligram of this oil contained sufficient vitamin A to promote growth of young albino rats.

Students' Lectures
Motion Picture Room
Third Floor

Sodium Salts of Nucleic Acid

By Adrian Thomas

The sodium nucleates were prepared from a nucleic acid obtained from Wheatgerms. The acid was dissolved in solutions of sodium hydroxide and precipitated by pouring into alcohol, to which had been added some neutral sodium acetate to prevent emulsification.

Sodium nucleates were prepared containing as a maximum eight atoms of sodium, assuming the molecule to contain four atoms of phosphorus.

If potassium acetate is used in place of the sodium acetate, some of the sodium is replaced by potassium. Upon using ammonium acetate instead of sodium or potassium acetate, a decrease in the sodium content of the salt is found, but only a part of the sodium which is lost is replaced by ammonium. Apparently a hydrogen-sodium-ammonium salt is formed.

Antiseptic Action of Zinc Chloride Salt of Aniline

By J. W. Howard and F. D. Stimpert

This salt was prepared by combining zinc chloride and aniline in molecular quantities and extracting the reaction mixture with boiling 95 per cent. alcohol. Softens at 230 deg. C, melts at 255 deg. C. Solubilities: At 20 deg. C., 0.64 grms. in 100 cc H_2O; 0.87 grms. in 100 cc. 0.4 HCl; 0.066 grms. in 100 cc. 95 per cent. alchol. V. slightly sol. in CS_2, $CHCl_3$, C_6H_6, $(C_2H_5)_2O$. More sol. in CH_3OH and acetone. Slowly decomp. by 3N Na_2CO_3, readily by 1 N NaOH or boiling H_2O.

Studies on Staphylococcus aureus indicate aniline has about 5 times the disinfectant power of $ZnCl_2$. The salt $(C_6H_5NH_2)_2$ $ZnCl_2$ in 0.6 per cent. soln. retards growth up to 25 mins. and will destroy in 30 minutes. Comparing with aniline and zinc chloride of the same conc. it shows a stronger antiseptic action.

Some Chemical Reactions of the Pancreatic Substance Containing Insulin

By Horace A. Shonle and John H. Waldo

The pancreatic substance containing insulin gives, after thorough purification, the following reactions: biuret, xanthoproteic, Millon's, Ehrlich's diazo, reduced sulfur and Folin and Looney's reaction for tyrosine and cystine. The Molisch and glyoxylic reactions are negative. Neither phosphorus nor purines can be detected and the amino acid content is very low.

This substance is soluble in dilute acids and alkalies. Its solution is laevo rotatory. The physiologically active portion dialyzes slowly through parchment paper, and can be precipitated by protein precipitants in such a state that it usually can be recovered from the precipitate. The C,H, and N content of the purest preparations approximates that of protein. The data secured indicate that the active principle is either a proteose or that it is closely bound to a proteose.

Synthesis of New Cinchophen Types

By Marston T. Bogert and F. P. Nabenhauer

Cinchophens containing the quinazoline nucleus have been synthesized as follows: (1) o-aminoacetophenone to o-acetamino acetophenone, to acetyl isatinic acid, to 2-methyliquinazoline-4-carboxylic acid; (2) isatine to benzyl isatinic acid, to 2-phenyiquinazoline-4-carboxylic acid (A); (3) o-phthaloylamino acetophenone to phthaloyl isatinic acid, to 2-(o-carboxyphenyl) quinazoline-4-carboxylic acid (B). Of these, (A) is strictly analogous structurally to Cinchophen, except that it carries the Ph and COOH groups on a pyrimidine instead of a pyridine nucleus. (B) resembles (A), but carries an additional COOH in o-position on the 2-Ph group. The physiological effects of these new compounds are being tested. Incidentally, many new intermediate and related products were also prepared, and will be described in the published article.

Cellulose Chemistry at the Milwaukee A. C. S. Meeting

The utilization of the waste liquor from sulphite process paper mills (the most largely used process at present) has been an extremely serious problem with the paper makers. This liquor can be successfully used, according to Ralph H. McKee, for the preparation of alcohol by a special process of fermentation which leaves a by-product of fuel considerably more than sufficient to carry out the necessary steps in the process.

An abstract of Prof. McKee's paper appears below along with abstracts of other contributions to the program of the Cellulose Division of the American Chemical Society at the meeting at Milwaukee, last week.

Chemistry of Wood

By Ritter and Fleck

Analyses of 10 or more American species, according to the methods used in former work, are reported. Both heartwood and sapwood were analyzed separately in all cases. The results obtained confirm the previous analyses and no new generalization can be made.

Partial Hydrolysis of Wood Cellulose

By Sherrard and Blanco

In hydrolyzing the cellulose obtained from wood by the Cross and Bevan method by boiling with water for several hours a very readily soluble material is obtained which is apparently a polysaccharide. This is the first report of a product of this kind being obtained from wood cellulose and further study of the product may give new information on the composition of wood.

Chlorination Method for Determining Cellulose in Woods

By Ritter and Fleck

It has been found that short chlorination periods of about five minutes each are as efficient as the usual longer periods of from ten to twenty-five minutes. These results will not only make it possible to shorten the time required for the cellulose determination but also suggest that chlorination treatments for the commercial removal of ligneous materials could be carried out more economically in shorter periods.

Chemical Changes Caused by Decay in Groundwood

By Bray and Andrews

Weighed amounts of groundwood pulp were subjected to various periods of decay and the weight and chemical composition of the partly decayed samples were determined. As in previously reported cases, the decay consists largely in the removal of cellulose, the lignin remaining practically unchanged. Even after a 2-year period, however, there was some cellulose left in the decayed pulp.

Determination of the Copper Number of Cellulose

By Sherrard and Blanco

This is a description of the modified method for determination of the copper number which is short and reliable and which has been found valuable in investigation of the residues left after each progressive hydrolysis of wood with hydrochloric acid.

X-Ray Diffraction Methods in the Study of Cellulose

By R. W. G. Wyckoff

This paper did not report any new work on the application of X-ray methods to cellulose, but it is intended to give cellulose chemists some idea of what use can be made of this physical method in solving their problems on the constitution of cellulose.

Viscosity of Cotton Cellulose

By J. O. Small

The use of cotton cellulose as a raw material for many industries has become widely extended and, from a practical point of view, viscosity is its most important physical property. A brief outline is given here of factors which are believed to influence viscosity from the growth of the cotton plant until the purification treatment has been completed. A method is described which has been used for determining the viscosity of cotton cellulose in cuprammonium solution.

Liquid Sulfur Dioxide Process for Sulfite Pulp

By Ralph H. McKee and Donald E. Cable

There are several species of coniferous woods which are only unsuited for manufacture into sulfite pulp, because of their high content of resinous matter. The process proposed here consists in chipping such wood, dissolving out the turpentine and rosin from these chips by use of liquid sulfur dioxide as a solvent, and then cooking the chips with the ordinary "sulfite acid." The pulp obtained is a good quality sulfite pulp. Furthermore, this process gives promise of yielding commercial quantities of turpentine and rosin as by-products at less expense than encountered in any of the present methods of isolation. Certain variables in the above extraction as studied experimentally are discussed. A few mechanical difficulties have been discovered, but have been satisfactorily solved.

Proper Use of Sulfite Waste Liquor

By Ralph H. McKee

To properly utilize sulfite waste liquor requires that it all be utilized and that no objectionable residue be emptied into the streams. The author shows that this can be accomplished, and with large financial profit, by fermenting by a new process, but one which has been tried in commercial size units, and, after distilling off the commercial grade alcohol, evaporating the residual material and using it as fuel. The fuel obtained from an average pulp mill is adequate to give a thousand horse power day and night, and in addition more than sufficient steam to do all the evaporating required.

Effect of Temperature in the Determination of Cellulose

By S. A. Mahood and J. L. Ebaugh, Jr.

Data from preliminary experiments, presented by one of us at the Birmingham meeting showed that the effect of temperature in the determination of cellulose in woods is negligible. This conclusion has now been confirmed by a further study of this phase of the determination for temperature ranging from 0 deg. to 30 deg. The results are in accord with those of Sieber and Walter, but contrary to those of Cross and Bevan and to the view of Renker.

Leather Chemistry at the Milwaukee A. C. S. Meeting

Following are abstracts of papers presented before the Division of Leather Chemistry at the Milwaukee meeting of the American Chemical Society, last week:—

Isoelectric Points of Hide and Bone Gelatins

By O. Gerngross

The isoelectric point of gelatin depends upon the source and previous history of the gelatin. Pure hide gelatin was found to have an isoelectric point, as determined by the electrophoresis method, at pH=5.5. The isoelectric point of pure bone gelatin is not less than pH=5.

Second Isoelectric Point Revevaled by Vegetable Tannage of Collagen

By A. W. Thomas and M. W. Kelly

Since the transition point of gelatin from the gel to the sol state is at 38 deg., collagen was tanned by wattle bark extract at different pH values at a temperature of 40 deg. Since the isoelectric point of gelatin in the gel state is at pH=4.7, and in the sol state at pH=7.7, the minimum rate of tannage at 40 deg. would be expected to appear in the region of pH=77, if collagen behaves like gelatin. The experiments support this expectation.

Unresolved Factors in Determination Of Strength and Elasticity of Gelatin Jellies

By S. E. Sheppard and S. S. Sweet

The elasticity or jelly strength of gelatin jellies have been determined both by torsion with cylinders of known dimensions and also by compression in an empirical jelly strength tester. The influence of the size of the jelly in the latter case has not so far been explained. Recent work has been carried out on the elasticity determined by stretching pieces of jelly of known dimensions and similar end effect, that is, effect of the container walls, has also been observed. By comparison with the results by the torsion instrument it is concluded that the jelly in the immedate neighborhood of a surface to which it adheres is in a peculiar state of stress, which enhances its elasticity. A redetermination of Poisson ratio has been made and the invariance of volume of gelatin jellies and the stress reconfirmed. Some further data on the relation of jelly strength to hydrogen iron concentration has been obtained.

Surface Tension of Gelatin Solutions

By Clarke E. Davis and Henry M. Salisbury

An investigation has been made of the variation of the surface tension of gelatin solutions with concentration, temperature, pH and age of solution. Bone, hide and ossein gelatin have been used in these examinations. All kinds of gelatin have a decided effect in lowering the surface tension; the higher the concentration the lower the surface tension. At concentrations greater than 2 per cent. gelation starts, but when the temperature is raised to 40 deg. C the surface tension is easily determined up to concentrations running as high as 10 per cent. An increase in temperature causes a decided decrease in the surface tension. Between 38 deg. C. and 38.2 deg. C. there is a sharp break in the curve giving further evidence of the transition point from sol to gel form previously reported at 38.03 deg. C. Increasing pH at 25 deg. C. causes a decrement in surface tension to a minimum around the neutral point from which a recovery is made with increasing pH. At 40 deg. C. a straight line function results in very dilute solutions. Age of gelatin solutions causes a small but perceptible change in the surface tension which phenomenon facilitates the duplication of results.

Combination of Chrome with Vegetable Tanned Leather

By M. W. Kelly and S. B. Foster

Details concerning the degree of chrome tonnage of vegetable tanned collagen are reported. The fixation of chrome as a function of the concentration of basic chrome liquor by leathers previously tanned with wattle at pH=2 and 5 over periods of 48 hours, 8 and 16 weeks shows that the presence of vegetable tannin markedly reduces the degree of chrome tanning. The leathers made at pH=2 chrome-tanned more slowly than those made at pH=5. Possibly this is due to the fact that the pH=2 leathers contained more vegetable tannin than the pH=5 leathers. The shape of the curves is similar to those previously obtained in the chrome tanning of raw hide substance. The points of maximum fixation of chrome are found in more concentrated liquors than was the case when raw hide substance was used. But these points of maximum were considerably lower than those obtained with raw hide. For example, in a period of 16 weeks contact of the leathers with the chrome solutions, the greatest amounts of chrome fixed were 163 mg. Cr_2O_3 per gram hide substance by the pH=5 leather, and 134 mg. for the pH=2 leather. The latter figure is quite close to tetrachrome collagen, whereas, if raw hide substance were used it would be almost double this value.

Varying Effects of Ions of Same Valence on Vegetable Tannin Fixation

By Arthur W. Thomas

The comparative effect of molar concentrations of sodium chloride, bromide and iodide and of the chloride of sodium, potassium and lithium upon the fixation of hemlock bark tannin by hide substance at pH=2, 5 and 8.5 show that ions of the same valence have differing effects upon the fixation of tannin. Neutral salts decrease the fixation of vegetable tannin at pH=2 and 8.5 and increase it at pH=5 at the concentration used. The order of effectiveness in depression was found to be chloride>bromide>iodide, and sodium>potassium>lithium (except at pH =8.5 where it was potassium>sodium>lithium). This is the order of the electronegative properties of the halideions and the order of the electropositive properties of the alkalies at pH=8.5. It is suggested that the electropositive or electronegative charactetr of the collagen (depending upon the hydrogen ion concentration) is affected by the ions mentioned, thus accounting for the differences in degree of fixation of tannin.

Influence of Gallic Acid and Pyrogallol on Certain Tannages

By Arthur W. Thomas

Results obtained show that the presence of "non-tans" does not always result in a retardation of the rate of tannage. Under certain conditions a "non-tan" may accelerate tanning. The chemical nature of the "non-tan," the amount present, the amount of tannin present, and the pH of the solution are factors which may markedly influence the reaction. While gallic acid retards tanning by tannis acid at pH=4 and at two different concentrations of tannic acid, yet at pH=2 it slightly increases fixation of the tannin, then decreases it followed by a second increase. This effect is also found in the case of Wattle tannage at pH=3 and 5. Pyrogallol regularly decreases tanning by gallotannin at a concentration of the tannin of 15 gm. per liter and at pH=2, yet at the same pH but at a higher concentration of gallotannin it accelerates the degree of tannage when present up to 0.2 mole pere liter, above which it effects a marked depression in the tannage. At pH=4 it decreases the tannage up to the same point as before, beyond which it accelerates it, followed by a second drop with the exception of the higher gallotannin concentration where the acceleration following the depression is very marked. These effects found for tannic acid tanning at pH=4 are reflected in the Wattle experiments at pH=3 and 5.

Quinone Tannage

By Margaret W. Kelly

Investigation of combination of quinone, or of polymerized products of quinone with collagen at different pH values shows no tanning action unless the solution is more alkaline than pH=5. The degree of tannage curve rises rapidly from pH=5 to 8, then falls slightly to pH=9, rising therefrom to pH=10 and then falls with increasing alkalinity. In 24 hours 100 parts of hide substance fix at pH=10 as much as 33 parts of "tannin" which increases to 47 parts in two weeks' time. Addition of hydroquinone decreases the rate of quinone tanning thus lending support to the theory of Meunier. The speed of tanning has been measured at pH=9. The curve rises very steeply during the first 7 hours and then bends and proceeds at a much lower rate.

Tannic Acid Tannage

By Arthur W. Thomas

Detailed experiments reporting the tanning of collagen by tannic acid are given. Briefly they show a marked similarity to the action of vegetable extracts commercially used. Tannage as a function of the concentration of the tannin solutions shows a sharp rise to a maximum at pH=4, 5 and 2, followed by a decrease which in turn is followed by a second rise of fixation in the very concentrated liquors. Tannage as a function of pH, carried out at various time intervals, shows results similar to those obtained with commercial extracts except that there is no tanning on the alkaline side of pH=8, thus verifying the validity of the Procter-Wilson theory of vegetable tannage. When tannic acid tanned leathers are extracted with hot alcohol they give up a large part of the tannin fixed, the extent depending upon the pH. At pH=1 the tannin was completely stripped. At higher pH the release of tannin was not so great, although large.

Concentration and Time Factors in Vegetable Tannages

By Margaret W. Kelly

The study of the fixation of the tannins of quebracho, wattle bark, nemlock bark, oak bark, gambier and larch bark by hide substance as a function of the con-

centration of the solutions has been made and data given. Plotting the amount of tannin fixed against the concentration of the solutions, the curves rise to a sharp maximum and then fall off, the maxima being sharper with the more astringent extracts. In the case of the very astringent extracts the maximum degree of fixation is found at about the same total solids concentration regardless of the time of contact, while with the less astringent extracts the maximum shifts in time toward higher total solids concentration. An interesting fact brought out by these experiments is the second point of inflection very sharply shown in the hemlock curves and less sharply, though distinctly, in the larch and gambier curves.

Effects of Ultraviolet Light on Dry Hide Powder

By Stuart B. Foster

Dry hide powder exposed to ultraviolet light becomes yellow in color and partially soluble in water yielding a yellow solution. The dissolved substances are precipitated by tannin. Hide powder treated by the light shows lower combining power toward a vegetable tannin than untreated hide powder while it tans with quinone just as well as untreated powder. The theory that exposure to ultraviolet light results in an emission of electrons from the protein does not seem to be tenable in this case.

Action of Trypsin on Diverse Leathers

By Frank L. Seymour-Jones

It is shown that trypsin is capable of hydrolyzing collagen which has been treated with various tanning agents, such as gallotannin, quinone, formaldehyde and copper sulphate. Where the tanning agent combines only with the carboxyl groupe of the collagen, such as with copper, hydolysis is as great as with untanned collagen, and does not depend upon the amount of tanning agent present. Where the tanning agent such as formaldehyde and quinone, combines with the amino groups of the collagen, the amount of hydrolysis depends on (a) the nature of the linkage, and (b) the amount of tanning agent combined with the collagen. Gallotannin and quinone tanned collagen are readily hydrolyzed by the enzyme, liberating the tanning substance, while formaldehyde tanned collagen is not so readily attacked. Chrome collagen is not hydrolyzed by trypsin and in view of the foregoing data chrome tanning is not quite so simple as generally believed.

New Method of Treating Raw Animal Fibers and Fabrics

By H. P. Jefferson

A quick and simple process of preparing skins and hides for tannage is described. The difference between "limed skins" as now used for making leather and the improved "pure skins" are given. The "pure skins" are composed solely of the purified fibers forming the true skin or cutis, and these fibers are absolutely unchanged chemically, never having undergone any plumping or any tendency to jellification. These skins when ready possess the following characteristics:—Natural color, elasticity, suppleness, absorbing qualities, collodial nature, and are many times stronger than the original skins, owing to the treatment. These skins may be kept for any length of time without deterioration. Leather made from these skins may be wet, and will always dry out soft. A greater yield of leather is obtained from limed skins. The treatment consists of first a strictly chemical step changing the extraneous substances from insoluble compounds into compounds which are soluble in either water or weak volatile alkaline solvent and detergent, and a fat solvent. This is done in vacuo. This treatment takes no longer to complete than it usually takes to soften and unsalt raw skins by older methods. They can be ready for the tanner in from a few hours to not over three days, according to the raw material.

Combination of Chromium with Hide Substance

By Erwin J. Kern

With increasing acidity, there is a decrease in rate of combination of Cr with hide substance. Three tanning series were started, all liquors having a concentration of 2.91 per cent. Cr_2O_3, but at the respective pH values: —0.92, 2.56, and 3.02. At intervals, samples of hide powder in contact with aliquots of each liquor were analyzed. Equilibrium had not been reached after 150 days, at which time the pH values had risen to 1.76, 2.88, and 3.20, respectively, and the amounts of Cr_2O_3 in combination with 100 grams of hide substance were 4.49, 11.95, and 14.42 grams, respectively.

Stability of Fat Liquors as a Function Of pH Value

By Albert F. Gallun, Jr.

For the ordinary type of soap-oil emulsion used to fatliquor leather, a pH value of 10 proved to be the alkalinity permitting the greatest concentration of stable fatliquor. The stability of the emulsion was greatest when alkali was used in amount exactly equivalent to that of the free fatty acids present in the particular oil mixture used.

Hydrogen-Ion Concentrations of Solutions Containing Aluminum or Chromium Sulphate

By Henry B. Merrill

Determinations were made of the pH values of solutions of pure aluminum sulfate and of chromic sulfate at various concentrations, and after the addition of sulfuric acid, sodium hydroxide, sodium chloride, or sodium sulfate. The results show that the hydroxide ion is more firmly bound by Al than by Cr, which helps to explain why Cr combines with hide substance so much more readily than Al. The change of pH value with time is also shown.

Points of Minimum Swelling of Ash-Free Gelatin

By John Arthur Wilson

The criticism that the two points of minimum found by Wilson and Kern was due to impurities in the gelatin is refuted by repetition of the work on Eastman's ash-free, highly purified gelatin. Points of minimum swelling were found at pH=4.7, and at pH=7.7.

Determination of Acidity of Vegetable Tan Liquors

By Erwin J. Kern and J. W. Koenig

A comparison was made between Procter's lime-water method and the hydrogen-electrode method, titrating to a pH value of 7.0 with sodium hydroxide. With some materials, like oak bark and wattle bark extracts, the two methods check perfectly. With other materials, the methods do not check at all, but, at least in some cases, can be made to agree by adding calcium salts to the tan liquor before using Procter's method.

Effect of Salts on Bacterial Count of Tannery Soak Waters

By John Arthur Wilson and Clarence J. Vollman

Studies were made of the effect of the fluoride, chloride, bromide and iodide of potassium in various concentrations. At concentrations of about 0.005 molar, all of the salts cause an increase in count, showing the presence of bacteria which grow only in the presence of salt. At higher concentrations, lower counts are obtained, but certain types of bacteria grow vigorously even in 0.200 molar strength.

Effect of Lime Water on Calfskin

By Guido Daub

A microscopical study of the gradual breaking down of certain tissues in contact with sterile lime water. During the first week the epithelial cells of the Malpigihian layer separate and then atrophy. The elastin fibers resist the action for from 3 to 4 weeks, but once the action starts, they break down relatively quickly, and disappear after 5 weeks. The paper is illustrated with photomicrographs, showing the effects on all the skin tissues.

Bating Power of Tryptic Enzymes

By Erwin J. Kern

Several commercial samples of pancreatin were examined for their power to hydrolyze both casein and the elastin of calf skin. It was found that comparative results are obtained only when the digestions are carried out at fixed pH values, and the solutions powerfully buffered, as in Northrop's method. When unbuffered casein solutions were employed, the tryptic activities of the several samples appeared in an order exactly the reverse of that where buffered solutions were employed. Where a quantitative measure of bating power is required, a determination should be made of the concentration of the pancreatin sample required to digest all of the elastin in a fixed time and at a pH value of 7.5.

Petroleum Chemistry at the Milwaukee A. C. S. Meeting

Abtracts of papers presented before the Division of Petroleum Chemistry at the meeting of the American Chemical Society at Milwaukee, last week, are given below:—

Accurate Measurements of Heats of Vaporization

By J. H. Mathews

The author has chosen to measure the energy input required to produce evaporation at a fixed temperature rather than to determine the energy freed upon condensation of a vapor. The method requires no knowledge of the specific heat of the liquid, is capable of a high degree of accuracy because of the precision of present day electrical measurements, and determinations can be carried out more quickly. The author has sought to avoid many sources of error inherent in methods previously used.

The method is suited only for pure liquids having a constant boiling point, and operates only at atmospheric pressure. Heats of vaporization of over forty liquids have been determined.

Vapor Pressures of Paraffin Hydrocarbons and Hydrocarbon Solutions

By E. H. Leslie and A. R. Carr

The vapor pressures of n-hexane, n-heptane and n-octane and of various solutions of these hydrocarbons have been measured. Düring's law has been found to hold for solutions each of whose components exert considerable vapor pressures, as well as for solutions of non-volatile solutes in volatile solvents. The construction of total vapor pressure curves for solutions is thus greatly simplified. Applications of vapor pressure data in the field of fractional distillation are discussed, particularly with reference to the distillation of hydrocarbon mixtures, and in the production and utilization of motor fuels.

Specific Heats of Lubricating Oils

By E. H. Leslie and J. C. Geniesse

The specific heats of six typical lubricating oils have been measured over a range of temperatures from 100 deg. F. to 290 deg. F. An increase of 35 to 40 per cent. in specific heats was found. It is obvious that a change as large as this must be taken into account in engineering work. The variation of specific heats with temperature is not the same for all oils, and it is suggested that further study might disclose some connection between the temperature rate of change of specific heats and the properties of an oil as a lubricant.

Effect of Oiliness on the Behavior of Journal Bearings

By D. P. Barnard, 4th, H. M. Myers and H. O. Forrest

The writers have made a rather extensive series of friction measurements of a journal revolving in a complete, cylindrical bearing. The object of the work has been to determine the effect of "oiliness" of the lubricant on the position of the transition point from stable, fluid film lubrication to unstable or "absorbed" film lubrication. The results have shown while oiliness tends to lower the transition point, this effect is too small to be of practical importance. The differences due to oiliness to be expected among commercial petroleum lubricants are negligible.

Physical Properties of the Paraffin Hydrocarbons

By Robert E. Wilson and W. Herbert Bahlke, Standard Oil Co., Whiting, Ind.

This paper compiles data from various sources in the literature on the vapor pressures, heats of vaporization, vapor densities, critical temperatures, etc., for the normal paraffin hydrocarbons. These data are then treated in the light of thermodynamics to choose between discrepant data, to fill in gaps and to extrapolate to higher temperatures and to compounds of higher molecular weight. This results in giving a fairly compiete table of approximate values of the more important physical constants for all the hydrocarbons up to tetracosane.

In treating the vapor pressure data, especial use is made of the relationship pointed out by Hildebrand. A slight modification of this method of treatment seems to give reliable data over a very wide range in temperature.

Solvent—Index of Refraction Method of Determining Oil in Wax

By Robert E. Wilson and Robert E. Wilkin

1. This article describes a method developed in the laboratories of the Standard Oil Co. of Indiana for determining the oil content of paraffin wax.

2. The new method consists essentially in dissolving a 5 gram wax sample in ethylene dichloride, cooling to about 0 deg. F., filtering off the wax, washing, and evaporating the solvent from the filtrate plus washings. This leaves a residue containing all the oil and the small amount of low melting wax which is soluble even at 0 deg. F. The amount of oil present therein is determined by adding enough of a special solvent to dissolve the residue and measuring the index of refraction, the corresponding oil content being determined by reference to a predetermined curve given in this paper.

3. The method gives good checks on samples containing known amounts of oil. It has been used to show up the magnitude and sources of the errors in the ordinary press method. These tests showed that the error in the press method may readily amount to as much as 2 per cent. of oil on samples containing 2 or 3 per cent oil.

Expression of Volatility for Gasoline

By W. A. Gruse

An effort has been made to substitute a more rational term for the 95 per cent. point in the arbitrary relation of dewpoint to distillation temperatures of gasolines. It has been shown that by employing a number of points in the distillation curve a term is obtained which is somewhat more closely proportional to the dewpoint than is the 95 per cent. point.

Temperature of Critical Dissolution with Aniline

By Thomas Midgley, Jr.

The temperature of critical dissolution with aniline of hydrocarbons has been advanced as an analytical method for approximate determination of the composition of mixtures of hydrocarbons. The Fuel Section of the General Motors Research Corporation has used the T.C.D. with aniline since 1918 and has not found it of great value in analytical work, but has been found to be a highly desirable physical constant to record, similar in this respect to specific gravity or distillation curve. Taken in conjunction with the specific gravity and distillation curve, it is of material assistance in estimating the probable composition of a sample. In one specific instance it has real value as an analytical determination.

Hydrocarbons Present in Midcontinent Kerosene

By C. R. Wagner

A closely fractionated kerosene cut from Midcontinent (Oklahoma) crude was separated into two fractions by use of liquid sulfur dioxide. The insoluble portion gave evidence of CnH_{2n} hydrocarbons, but no hydrocarbons of the paraffin series. The oils soluble in sulfur dioxide from their specific gravity, index of refraction, carbon-hydrogen ratio and boiling points belong to the hydrogenated naphthalene series.

Effect of High Frequency Electric Discharges on Cracking

By J. J. Jakosky

The effects of both high and low frequency discharges on petroleum hydrocarbons during cracking have been the subject of much discussion in the literature, and patents have been issued in which important commercial utilization of high frequency effects is claimed.

Extravagant claims of no carbon formation, polymerization of uncondensable gas for formation of gasoline, less unsaturation and a more easily refinable product cannot be confirmed by the experiments to date. Whatever effect was obtained by using the high voltage corona (at both high and low frequencies) could be obtained by merely using a higher temperature in the crackinz zone.

The results of the work show that little hydrogenation can be obtained by the corona discharge. It seems further, that commercial application of the corona discharge during cracking of the petroleum will hardly be feasible. Theory relative to ionization effects in the electric and corona fields is discussed.

Viscosities of Fuel Oil from Panuco Crude

By R. H. Brownlee and W. H. Colburn

The paper first describes the development of a new method for making bunker C fuel oil and fuel oil having lower viscosities from heavy Panuco crude oil. Tables and charts illustrate the laboratory developments which later led to semi-commercial and commercial operation of the process. The general results of these later operations are stated.

It was learned that by stopping distillation at the proper time, sufficient heat treatment of the oil was accomplished so as to produce the required viscosity of fuel oil. While viscosity, flash and fire of this fuel oil could be made to correspond with those of 14-16 gravity fuel oil from light Mexican crude, its gravity was 11-12 deg. B.

The behavior of this fuel oil, upon being stored and handled, is described and discussed.

Temperature Error in Saybolt Viscosimeters

By W. H. Herschel

In instruments not completely immersed in the bath there is a possibility of temperature error, that is a difference between the nominal and the actual temperature of test. The error in seconds, or in Saybolt viscosity, for a given temperature error, will vary with the viscosity and with the crude of the oil under test. Tests were made at 100 deg. F., with bath at 100.25 deg. F., with an instrument of the U and F type, in which the thermometer could be retained in the oil tube during the run, and also with Geo. M. Saybolt instrument No. 108. From a study of data thus obtained, and of the temperature coefficient of viscosity in the outlet tube was lower than the nominal temperature of test, and lower than the temperature in the oil tube at the end of the run.

A number of anti-knock preparations were discussed from the viewpoint of commercial application, by Thomas Midgley, Jr., of the General Motors Chemical Co.

Allan-Pfeiffer Co. Receiver Asked in Stockholders' Suit

ST. LOUIS, Sept. 11, 1923.

Fourteen stockholders of the Allan-Pfeiffer Co., chemical manufacturers, this city, have filed suit in the Circuit Court for a receiver, charging that the company is insolvent due to mismanagement. The capitalization is $500,000. Officers of the company are made co-defendants.

The complaint alleges that the concern is indebted to the owner of the building it occupies for $14,000, and to Charles E. Lane for royalties claimed to be due on chemical formulas not paid for. Mr. Lane has sued the company for this sum. Other debts which the company cannot pay are alleged in the complaint.

Make Booth 21 Your Headquarters—Use It as an Information Bureau

Industrial Chemistry at the Milwaukee A. C. S. Meeting

A wide variety of subjects was considered by the Industrial and Engineering Chemistry Division of the American Chemical Society at the meeting at Milwaukee, last week. Abstracts of a number of the papers presented on that occasion are given below:—

Patent Litigation: Its Causes and Its Results

By James Otis Handy

The causes of patent litigation most frequently lie in defects in the patent itself. It should define the invention clearly and not too broadly. This will be done if in the case of chemical and metallurgical inventions the patent chemist is given free hand in the preparation of claim and specification.

Competent examiners in the Patent Office are most essential.

Courts should have technical advisers.

Two instances of hardships worked by decisions in patent litigation are given in some detail. In one case, a patent for a thing really novel, but too broadly claimed, was declared invalid. In another, a patent limited in its language but covering a novel and valuable discovery was at first declared invalid and not infringed, and on appeal was sustained but declared by the majority of the court as not to have been infringed.

Magnesium Perchlorate Trihydrate as Drying Agent in Combustion Analyses

By G. Frederick Smith, Morris Brown and John F. Ross

Magresium perchlorate trihydrate is so efficient a dehydrating agent that it may be used in the place of phosphorus pentoxide and obviously of other less efficient drying agents in the combustion method for determining carbon in steel and carbon and hydrogen in organic compounds. It will absorb 30 per cent. of its weight of water. It is easily and cheaply prepared and shows other advantages over the drying agents now commonly used.

Electrometric Study of the Titration Of Boric Acid

By M. G. Mellon and V. N. Morris

Mannitol, glycerol, etc., increase the degree of ionization of boric acid in aqueous solution to such an extent that one may then determine it by titration with a base in the presence of a suitable indicator. Many polyhydroxy-organic compounds, such as polyalcohols, sugars, polyphenols and hydroxyacids, change the acidic properties of the acid; but the pH curves for its titration in the presence of these compounds show that, when used in the proportion of four moles of organic compound to one of boric acid, only a few are of value for making volumetric determinations. Of the compounds used the polyalcohols are the most effectie, while the hydroxy-acids are of no value. From the standpoint of effectiveness along with low cost, invert sugar seems to be the most desirable.

Natural Water Corrosion of Steel in Contact with Copper

By W. G. Whitman and R. P. Russell

Experiments are described wherein the natural water corrosion of steel in contact with a metal lower in the electromotive series has been quantitatively determined. The results show that the total corrosion is the same with bare steel plates as with steel specimens of the same size having 75 per cent. of their surface copper plated, i. e., in the latter case the corrosion per unit area of steel is four times as great as in the former. The total corrosion observed is determined by the total effective surface available for the depolarization of hydrogen by dissolved oxygen, the actual corrosion occurring on the steel alone.

These results are not readily explainable by the colloidal theories of corrosion advanced by J. N. Friend or Bengough and Stuart, both of which agree that hydrogen is not an essential in natural water corrosion. The data are, however, in entire accord with an electrolytic mechanism of corrosion. The electrolytic theory explains these results by picturing the increased corrosion per unit area of steel as caused by the depolarization of a film of nascent hydrogen. This film is deposited on the steel and on the adjacent copper surface and its removal is effected by diffusion of dissolved oxygen into the metal. The rate of corrosion is limited by the rate at which oxygen can diffuse in to react with the surface film of nascent hydrogen.

The importance of these quantitative data in deciding as to the mechanism of the corrosion of steel is emphasized from both a theoretical and practical point of view.

Effect of Electrolysis on Corrosion of Metals in Photographic Solutions

By J. I. Crabtree, H. Hartt and G. Matthews

The resistivity of a metal or alloy towards any photographic solution is impaired if it is in electrical contact with a second metal, which is more electropositive in the solution used. A photographic electro-motive series is given wherein the rate of corrosion of the metal or alloy is roughly proportional to the distance of separation of the metals as listed. The metals plated with silver either chemically from an exhausted fixing bath or by electro-plating are more resistant to developing solutions than unplated metals according to the homogeneity of the silver coating, but their resistivity towards fixing solutions is only slightly greater than that of the unplated metals. The presence of copper or its alloys in electrical connection with a more electro-positive metal in a photographic developer materially shortens the life of the developer. Tin and alloys containin tin tend to produce high initial fog in a photographic developer, but this fog later decreases to a normal value when the solution possesses better developing powers than a blank, indicating the possibility of using a tin alloy or a metallic couple which will graually discharge tin into the developer and thereby act as a preservative of the solution.

For the practical worker the relative suitability of various metallic couples for use with developing and fixing solutions is discussed.

Effect of Alkaline Solutions on Corrosion of Steel in Water

By F. N. Speller and C. R. Texter

The work reported in the paper showed the rate of corrosion in steel pipe is decreased in a closed system by increasing concentration of the alkaline, but no point was found where corrosion increased to a maximum in alkaline solutions; nor did corrosion cease within the limits of alkalinity used in these investigations (4.7 grams per liter) under oxygen contraction and temperature conditions which were used to approximate hot water and boiler conditions.

Apparently the first effect after starting the flow of an alkaline water through clean pipe, is the rapid formation of a protective coating or film which prevents an intimate contact with the metal of the water.

We imagine that this film formation is of greater importance in corrosion than the decrease in hydrogen ion concentration of the water. This film is so adherent as to require cleaning with acid before the original rate of corrosion is restored. As indicated by a check test with neutral water in this case the film was evidently caused by the alkalinity and not by the scale-forming constituents in the water, as shown by runs with alkaline and distilled water. We have other investigations (not yet published) carried on by the authors which indicate that the protective effect of this film and its permanence may be greatly increased by the addition of alkaline reagents to the water.

Vanillin Solubilities

By Clarence E. Mange and Otto Ehler

A table with curves is given of the solubility of vanillin in water and dilute alcohol-water solutions. Curves are presented, showing that only slightly more vanillin will dissolve in glycerol than is soluble in water, the commercial "solvent" power of glycerol being dependent upon an unstable supersaturated condition due to its high viscosity. A table and curves of practical solubility values of vanillin in glycerol-water solutions are given. A simple synthetic and an empirical method for solubility determinations are described. Data are given on the formation and hydrolysis of vanillin-glyceride, a compound often separating from concentrated flavors.

Equilibrium Moisture of Cotton Yarn

By Tyler Fuwa and A. P. Godbout

The equilibrium moisture for three kinds of natural cotton yarn, and of yarn baked for five days at 160 C., has been studied, the equilibrium points being obtained by a progressive dehydration of the saturated cotton to dryness, and then by hydration to the original point of saturation. As a result of this work it was found that:—

1. The equilibrium moisture for cotton is best expressed by a narrow hysteresis loop, and not by means of a single curve, as is indicated by the data of Hartshorne and others.

2. The equilibrium moisture of Arizona and Egyptian cottons are identical, and Peeler cotton is substantially the same under like conditions, being somewhat lower than the other two.

3. A preliminary baking for 5 days at 160 C. somewhat lowers the equilibrium moisture, probably due to a change in the fiber structure with heating.

Some Tensile Properties of Cotton Yarn

By Tyler Fuwa

An investigation was carried out to determine the effect of important variables, such as moisture content, temperature, prolonged heating, and lubrication upon the tensile properties of cotton yarn. Two distinct varieties of cotton were studied, using an apparatus which permitted of close temperature and humidity control.

It was found that up to about 12 per cent. moisture, tensile strength is increased, and beyond this point even soaking in liquid water produces no further increase in strength. An increase in temperature from 20 deg. to 140 deg. C. caused a decrease in tensile in the case of dry yarn of about 40 per cent. At any given temperature and humidity, the tensile value is practically a resultant of the two effects alone.

Baking the yarn at 110 deg. C. for eight days caused only a slight decrease in strength, but at 140 deg. C. the rate of decrease was rapid.

Solvent extraction of the yarn, thus removing the natural fats and waxes, caused an increase in tensile of some 39 per cent., while an addition of castor oil to this extracted yarn reduced its tensile considerably, but not down to the value of the original yarn.

Granular Carbon Resistor Furnaces

By M. M. Austin

Two types of granular carbon furances are described in which some of the disadvantages of such furnaces have been overcome and their construction simplified. Drawing and description of a furnace for temperatures of 1700 deg. C., having a heating space 4-inches in diameter by 6 inches deep, and operating on current at 200 to 400 amperes and 30 to 70 volts are given. Drawings and description, including current requirements, of a furnace of another design and somewhat larger capacity is presented. It is thought that these descriptions will be of considerable assistance to others in building such furnaces and in operating them with satisfaction.

Flour Manufacture

By C. H. Bailey

Success of roller milling process is dependent upon differences in the physical characteristics of the several wheat kernel structures. Thus bran is fibrous and tough, germ is rich in fats and hence greasy, while endosperm or floury portion is friable, and tends to fracture when struck a blow.

Principal operations in roller milling are:—Cleaning the grain, crushing or "breaking" on break rolls, sifting or bolting, purification, reduction of granular middlings on smooth rolls, dusting the offal, bleaching. Combination of N_2O_4; Cl_2; NOCl; NCl_3; $(C_6H_5CO)_2O_2$; Cl_2—NH_3.

A flour stream results from each grinding operation, and additional streams are commonly derived from the dusted separations. Each stream is more or less distinctive in composition and properties. Middlings flours are choicest, chunks and sizings rating next, then certain break flours (2nd and 3rd break) followed by tailings and duster flours.

Flour grade is generally correlated with:—(a) Ash content, (b) Pentosan content, (c) Fat content, (d) Fiber content, (e) Titrable acidity of water extracts, (f) Soluble protein content—exceptions in damaged wheat, (g) Electrolytic resistance or specific conductivity of water extracts, (h) Buffer action of water extracts, (i) Color or visual appearance of dry flour, (j) Color change on wetting—Hein's patent, (k) Catalase activity (l) Relative proportion of branny particles, (m) Count of wheat hairs per unit of flour.

Flour and Bread as Colloid Systems

By Ross Aiken Gortner

Wheat flour is the only one of the cereal flours which is adapted to the manufacture of yeast leavened bread. It owes this advantage to the nature of its proteins which are capable of forming a colloid gel of sufficient tenacity to retain within the dough the carbon dioxide produced for the yeast fermentation and thus "raise" the dough. The quality of the flour depends largely upon the colloidal properties of these proteins. The colloidal state of the glutenin may vary widely from flour to flour, and a measure of the colloidal properties of the glutenin may be a measure of "flour strength."

Many colloid changes take place during the baking of bread and in the staling of bread. The main changes in baking are the gelatinizing of the starch and the heat coagulation of the proteins. Staling of bread appears to be due to a metastable condition of the soluble starch which reverts to a solid form which has a lower hydration capacity than has the gelatinized starch.

Panary Fermentation

By C. Brewster Morison

A brief resume of some of the important biochemical aspects involved in panary fermentation is presented with special reference to the influence of various factors in its control.

Role of Bread in Nutrition

By Worth Hale

The consumption of wheat products in the United States rose, in the years 1915 to 1920, from 5.3 bushels to 5.8 bushels per capita. Bread is the chief nutrient eaten at one or more meals each day by many growing children. The nutritive quality of bread thus becomes an important factor in the growth and health of these children and, to a less extent, the health of adults.

Only one commercial white bread and no whole wheat bread, of many examined, was found to be adequate for the growth and maintenance of animals. Experimental white breads, made with the addition of the aqueous extract of wheat embryo and with a small percentage of milk, proved far superior to the average white or whole wheat bread. A commercial white bread, developed along similar lines, likewise is far superior to all breads examined, including so called cream, vitamin, and whole wheat breads. This bread equals the growth inducing qualities of normal diets and protects animals ffrom the development of xeropthalmia and polyneuritis. Its high value as a nutrient is further supported by children feeding tests.

Benefits to Industry Through Application of Pure Science

By Alexander Silverman

This paper enumerates many of the applications of pure science to industry, which have resulted in the establishment of new industries, or increased the returns to existing industries applying them. Statistics obtained from the National Chamber of Commerce, the Milwaukee Chamber of Commerce and the United States Census Bureau are cited to furnish information concerning the enormous investment of capital in industries directly or indirectly under chemical control. The purpose of the paper is to have manufacturers realize their obligation toward educational institutions, so as to secure their co-operation with these institutions. The resulting developments would further benefit the industries, and at the same time afford better facilities for the teaching of pure science in colleges and universities.

Young Men for Industrial Leadership

By C. A. Brautlecht

This paper considers the requirements of young men who are to become our future mill superintendents and managers. Factors important in industry today, such as quality, quantity, economy, matter, energy, and labor are stated from the viewpoint of the employer, the educational institution, the young man in college, and the young man in industry who finds himself with interest in the industry, with grit and ambition, but without educational advantages. Some of the fundamental ideas associated with educational and industrial conditions are mentioned which are of interest to parents, teachers and employers.

Dyes and Other Coal Tar Chemicals Imported Through New York in August

(Continued from page 17)

Medicinals, Photographic Developers and Other Coal-Tar Chemicals

Shultz No.	Name of product.	Maker.	Pounds.	Invoice value.	Origin.	Per cent.
nc	Aminopyrine		397	1,251	Germany	100
nc	Antalgol		5	9	France	100
nc	Antipyrine		1,880	4,996	France	100
nc	Antipyrine crystals		35	43	Germany	100
	Atoquinol, pure		33	197	Switzerland	100
nc	Benzoate of mercury		0.625	5	France	100
c	Caffeine sodio benzoate		0.422	9	England	100
c	Cresylic acid, pure		2,094	235	England	100
	Developer B pdr.		330	354	France	100
	Developer Z (phenylmethylpyrazolon).		110	17	Germany	100
c	Diamine phenol hydrochloride		37.5	59	Germany	100
nc	Dimethylamidopyrin		20	53	Switzerland	100
nc	Dimethylamidopyrazolon		20	53	Switzerland	100
c	Diethylaniline		3.3	2	Germany	100
c	Dimethylaniline		5.6	8	Germany	100
nc	Enesol		22	410	France	100
nc	Enesol amps. 5 cc.		.39	94	France	100
c	Epinine 10 cc.		.53	5	England	100
c	Epinine 25 cc.		9.84	72	England	100
nc	Epinine hydrochloride		1	10	England	100
c	Faturan sheets (coal-tar product)		127	144	Germany	100
	Glycin (aminoacetic acid)		50	83	Germany	100
nc	Guaiacol cacodylate		5.3	35	Germany	94
					France	6
	Leucotrope W conc.		500	325	Germany	100
c	Metol hydroquinone solution		*75	13	Germany	100
c	a-Naphthol		1.65	2	Germany	100
c	b-Naphthol		1.38	2	Germany	100
	Naphthol ASSW pdr.		1	2	Germany	100
nc	Para cresol		50	31	England	100
	Paraphenylenediamine		1,000	900	Germany	100
c	Phenylacetic acid refined		2.2	4	Germany	100
nc	Phenylethylpyrimidine		151	995	Germany	100
c	Phenylhydrazine		14.3	30	Germany	100
c	Phenylhydrazine hydrochloride		7.15	16	Germany	100
nc	Physostigmine salicylate		.156	19	England	100
nc	Pyramidon (dimethylamino-antipyrene)		1,500	8,436	France	100
nc	Pyrocatechol		3.3	6	Germany	100
c	Resorcine tech.		7,314	3,880	France	100
nc	Salicylate or didymium		7.71	22	Germany	100
nc	Salicylate of soda solution		33	50	France	100
c	Sodium dioxynaphthalene disulfonate coml. (1'8'3'6)		3.3	4	Germany	100
c	Sulphanilic acid		2.9	1	Germany	100
nc	Stovaine 0.01		1	7	France	100
c	Thiophen		0.55	11	Germany	100
c	Toluene		11	3	Germany	100
c	Toluidine, ortho		2.6	0.65	Germany	100
c	Toluidine, para		3.3	5.50	Germany	100
nc	Triolith (wood preservative)		440	84	Germany	100
c	Uranine (fluorescein sodium)		2.6	9	Germany	100
nc	Wood stains (coal-tar deriv.)		564	112	Germany	100

* Gallons.

The first fall luncheon of the American Manufacturers' Export Association will be held September 20, at 12:30 o'clock, at the Whitehall Club, this city, Irving T. Bush, president of the New York State Chamber of Commerce, will speak on conditions in Europe.

F. W. Zerban, research chemist with Pennick & Ford, Marrero, La., will assume charge of the New York Sugar Trade Laboratory, this city, next month, when Dr. Charles A. Browne, the present head, enters the government service at Washington.

Neo-Salvarsan Duty Fixed on U.S.Value

Appraisers Board Holds That Product Is a Competitive Coal-Tar Derivative

In considering the dutiability of neo-salvarsan imported at the port of New York by Dr. Nicola Stella (Reappraisement No. 12416-A), Board 3 of the United States General Appraisers has held that this product is a coal tar derivative "similar to or competitive with the domestic product of the same name," and that, therefore, it is to be appraised on the basis of the American selling price of the domestic product. The original appraisal of the neo-salvarsan importation in question was based on the American valuation. This was reversed by Judge Brown, who sustained the entered value, and it was from his decision that the government appealed to Board 3.

The findings of the board are set forth by General Appraiser I. F. Fischer as follows:—

The merchandise in question is known and sold as neo-salvarsan. It was appraised on the basis of the American selling price of a domestic product similarly known and sold, but on reappraisement the entered value thereof was sustained. The government now applies to this board for a review of said reappraisement on the record therein made.

It is not denied—if it is not indeed tacitly admitted by both parties hereto—that the merchandise is a coal-tar product.

Now, paragraph 28 of the Tariff Act of 1922 provides that the duties therein imposed shall be—

based upon the American selling price (as defined in subdivision (f) of section 402, Title IV) of any similar competitive article manufactured or produced in the United States;

and further, that:—

for the purposes of this paragraph any coal-tar product provided for in this act shall be considered similar to or competitive with any imported coal-tar product which accomplishes results substantially equal to those accomplished by the domestic product when used in substantially the same manner.

Section 500 of said act charges the appraiser with the duty of appraising imported merchandise "by ascertaining or estimating the value thereof by all reasonable ways and means in his power," and directs that he "describe the merchandise in order that the collector may determine the dutiable classification thereof." This the appraiser evidently did when he found the present merchandise to consist of a coal-tar product bearing a well-known trade name, and that said product was "similar to or competitive with" a domestic product of the same name.

Such findings of fact and the resultant conclusions of law this board, on the record before it, is unable to disturb, the evidence submitted by the importers being deemed insufficient to overcome the presumptive correctness which attached to the action of the appraiser. On the contrary, the record supports the conclusions reached by that official, in that it contains the following uncontradicted testimony of Dr. Carl J. Hertzog:—

Q. You personally, were you personally engaged in the manufacture of neo-salvarsan by H. M Metz & Company?
A. I was during the war, and actually made the salvarsan and the neo-salvarsan up to 1919.

* * *

Q. Have you ever seen the article like Exhibit 1 manufactured in Germany?
A. I did.
Q. And is it that same article, that Exhibit 1?
A. It is.

* * *

Q. Where did you see it made, doctor?
A. I saw it made in Germany and I saw it made here.

* * *

Q. And do they use the same formula?
A. They do.
Q. That they used some years ago?
A. We do, exactly the same formula.
Q. Is it the same or different from the one you saw in use by Farbwerke?
A. It is exactly the same.

* * *

Q. You are familiar with its composition over a term of years?
A. I am.
Q. Can you say that the articles are the same?
A. Yes.
Q. Chemically?
A. Chemically, yes.
Q. And are they identical, doctor?
A. We claim that—yes.
Q. Well, are they, as a matter——?
A. They are chemically identical with the product made abroad by the German manufacturer.

True, there is also some testimony in the record by a physician alleging different results obtained by him from the use of the foreign as distinguished from the domestic product. But it may well be that these clinical variations were due largely to the physical condition of the different patients undergoing treatment. We certainly believe that some allowance should be made therefor, especially in view of the physician's testimony that the condition of the patient had a material effect on the results accomplished.

At any rate, in construing a statute of this kind we believe that the rule of reason should prevail. Certainly, the law does not demand proof of exact equality in results accomplished as a condition precedent to classifying a coal-tar product under paragraph 28 and applying thereto the American selling price as the prescribed method of appraisement. Some recognition should be given to the fact that the provision only contemplates foreign articles which produce results substantially equal to those accomplished by domestic products. As was said by Woodbury, Circuit Judge, in Adams vs. Edwards (1 Fed. Cases, No. 53, at page 114):—

* * * And I do not say, as one of my brethren upon the bench has said, that there is no definite signification to the word "substantial." When we say a thing is substantially the same, we mean it is the same in all important particulars. It must be of the same material when material is important; it must be of the same thickness when thickness is important; it must be applied in the same way, condition and extent to the doors as well as the sides when either of these circumstances makes an essential difference.

In Hobbs vs. Beach (180 U. S., 383, at p. 400) the United States Supreme Court, in construing the words "substantially as described or set forth," said:—

Without determining what particular meaning, if any, should be given to these words, we are of opinion that they are not to be construed as limiting the patentee to the exact mechanism described; but that he is still entitled to the benefit of the doctrine of equivalents, and that it is still true, as observed in Morley Sewing Machine Co. vs. Lancaster, 129 U. S., 263, 273:—"Where an invention is one of a primary character, and the mechanical functions performed by the machines are, as a whole, entirely new, all subsequent machines which employ substantially the same means to accomplish the same results are infringements," although the subsequent machine may contain improvements in the separate mechanisms which go to make up the machine.

And in Electric Candy Machine Co. vs. Morris (156 Fed., 972) it was held that "authorities concur that the substantial equivalent of a thing in the sense of the patent law is the same as the thing itself; so that if two devices do the same thing in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape." Machine Co. vs. Murphy, 97 U. S., 120, 24 L. Ed. 935."

Again, in the case of Cantrell vs. Wallick (117 U. S., 689) wherein the court said:—

It may be true, as contended by the defendants, that the device used by them is in some respects better than that of the plaintiff, but this cannot relieve them from the charge of infringement if the devices are substantially alike. **The rule was well stated** by Mr. Justice Clifford, in delivering judgment in the case of Machine Company vs. Murphy, 97 U. S., 120, 125, where he said that "in determining the question of infringement the court or jury, as the case may be, are not to judge about similarities or differences by the names of things, but are to look at the machines or their several devices or elements in the light of what they do or what office or function they perform, and to find that one thing is substantially the same as another if it performs substantially the same function in substantially the same way to obtain the same result.

The patent law abounds in decisions of like tenor, and under them the foreign neo-salvarsan here under discussion could scarcely escape the charge of infringement, if its competitive domestic product were manufactured under letters patent, since it is clear from the evidence that the two are identical in chemical composition. We cannot see why they should be deemed less identical for tariff purposes.

Therefore, on the evidence submitted we find (1) that the imported neo-salvarsan is a coal-tar product, and (2) that it is similar to or competitive with the domestic product of the same name in that it "accomplishes results substantially equal to those accomplished by the domestic product when used in substantially the same manner," and we accordingly hold as matter of law that the appraiser correctly based his valuation thereof on the American selling price of said domestic product, as prescribed by statute.

The decision of the general appraiser is reversed and the appraised value affirmed.

Byron S. Waite,
W. C. Adamson,
I. F. Fischer,
Board 3, United States General Appraisers.

Diethyl Sulphate as An Ethylating Agent

For some time past Mellon Institute of Industrial Research, University of Pittsburgh, Pittsburgh, Pa., in connection with the work of the Multiple Industrial Fellowship sustained by the Carbide & Carbon Chemicals Corpn. 30 East 42d street, this city, has been making a thorough investigation of the properties and uses of diethyl sulphate as a general ethylating agent. A. R. Cade, an industrial fellow of the institute, under whom the greater part of the work on this subject has been carried out, has published recently (Chem. & Met.) a report of the findings of this investigation, which report shows diethyl sulphate to be a most satisfactory general reagent for introducing ethyl groups into organic compounds.

Mellon Institute will be pleased to furnish samples of diethyl sulphate to anyone interested, and Mr. Cade will correspond gladly with anyone who desires further information upon this subject. Reprints of the article referred to above may be obtained by writing to Mr. Cade at the institute.

Dye Chemistry Notes

Two papers of timely interest, presented before the Division of Dye Chemistry of the American Chemical Society at the Milwaukee meeting, last week, are abstracted below:—

Researches on Thiazoles

By M. T. Bogert and F. D. Snell

An improved technic has been worked out for the production of dehydrothio-p-toluidine from p-toluidine and S, giving yields of pure substance (m.p. 193 deg. corr.) amounting to over 50 per cent. Mono-, di- and tri-sulfo derivatives have been prepared and studied with reference to the location of the sulfo groups. From the monosulfo acid, dehydrothio-p-toluidine was prepared by hydrolysis and thioflavine T by simultaneous hydrolysis and methylation. Through the diazo reaction, the sulfo derivatives were deaminated to phenyl toluthiazole sulfo acids. Other derivatives included the thiourea and benzoyl compounds. From o-chloro nitrobenzene, through various intermediates, 2-p-nitrophenyl and 2-p-aminophenyl benzothiazole were synthesized.

Formation of Metallic Compounds in Dyeing

By R. E. Marker, M. Korosch and N. E. Gordon

Different mordants, such as alumina and ferric oxide, have been run with some of the common dyes, as Orange II and Crystal Violet, under carefully controlled conditions for the purpose of checking upon absorption as a chemical process. At the present stage of investigation there seems to be very good evidence of chemical reaction, at least in certain cases.

Recent Incorporations

Arkansas

Southern Arkansas Oil Co., Pine Bluff; $1,000,000; Frank B. Tomlinson, Harvey Hogg.

Alabama

Colbert County Co-operative Oil Co., Sheffield; $20,000; W. H. Richardson, R. P. Redman.

Spring Valley Oil Co., Tuscumbia; $15,000; H. A. Pitts, R. L. Montgomery, W. V. Walker.

Lime-Cola Bottling Co., Cordova; $15,000; S. D. Kilgore, J. F. Bargamer, A. R. Disney.

Colorado

Colorado Oil & Gas Co., Fort Collins; $50,000; A. C. Abbott, A. L. Rohling, W. E. Bryson.

Renfro Oil Co., Denver; $500,000; J. A. Rendle, A. M. Gildersleeve and F. T. Henry.

Delaware

Dew-On Corpn., Wilmington; manufacture preparation for polishing furniture; $2,500,000. Corporation Trust Co. of America.

Specialty Glass Co., Wilmington; manufacture glass; $600,000. Corporation Trust Co. of America.

Chemical Endowment Foundation, Wilmington; fireproofing processes, chemicals; $100,000. Corporation Service Co.

Magnesia Cement & Carbonic Gas Co., Wilmington; obtain concessions from foreign countries; $600,000. Delaware Registration Trust Co.

Galloway Oil Corpn., Dover; develop oil lands; $10.000,000. Arley B. Magee, Dover, Del., agent.

Hi-Power Corpn. of America; manufacture battery fluids; $1,200,000; V. G. Faris, Leonard G. Hagner, R. L. Spurgeon, Wilmington, Del. Corporation Guarantee & Trust Co.

Midwest & Gulf Refining Co., Dover; lubricating oils; $100,000. Arley B. Magee, Dover.

Premier Cereal & Beverage Co., Dover; manufacture; $50,000. Capital Trust Co. of Delaware.

International Tube Corpn., Dover; chemists and druggists; $2,000,000. U. S. Corporation Co.

Monarch Service Stations; gas, oil; $250,000; Robert M. McGauley, John A. Demarco, Florence Waterman, New York. Walter P. Powell, Wilmington.

Cop-Go Auto Products Co., Wilmington; manufacture dressings for leather goods; $1,000,000. Colonial Charter Co.

Schaffer Alles Chemical Co. to Alles Harrison Chemical Co., Pittsburgh, Pa.

American Arsenic Co., Dover; mining; $1,000,000. U. S. Corporation Co.

Standard Reclamation & Salvage Corpn., Wilmington; develop oil lands; $1,000,000. Corporation Trust Co. of America.

Indiana Paint & Pigment Co., Wilmington; manufacture; $1,000,000. Corporation Trust Co. of America.

Excelsior Pipeline Co., Wilmington; oil; $500,000. Corporation Trust Co. of America.

Texland Oil Corp., Dover; $600,000. U. S. Corporation Co.

Mid-South Development Co., Wilmington; oil company; $400,000. Corporation Trust Co. of America.

Northern Gasoline Co., Wilmington; oil lands; $390,000. Delaware Registration & Incorporation Co.

Almond Smash Bottling Works, beverages, syrups, flavoring extracts; $300,000; Frank A. Cabeen, Jr., Haverford, Pa.; George C. Meade, Ambler, Pa.; I. Raisch, Philadelphia, Pa. U. S. Corporation Co.

McKean County Paint Manufacturing Co., Wilmington; $50,000. Corporation Service Co.

Susquehanna Oil & Gas Co., Wilmington; lands; $250,000. Franklin L. Mettler, Wilmington.

Wingfield, Doble & Wilson, Wilmington; refine crude oil; $500,000. Corporation Trust Co. of America.

Armour Products Corp., Dover; $1,000,000; paints, dyes, varnishes. U. S. Corporation Co.

Ryco Extract Co., Wilmington, syrups, etc., $10,000. Corporation Trust Co. of America.

Lynwell Oil Co., Wilmington, general pipeline and storage, $100,000. Corporation Trust Co. of America.

Salas Chemical Co., Philadelphia, manufacture barber supplies, $160,000; Ralph Rosenfelt, Louis Rosenfelt, Gustave Kohn.

Whistle Co. of California, Wilmington, beverages, $375,000. Corporation Trust Co. of America.

Olympic Oil & Gas Co., Wilmington, $25,000. Delaware Charter Co.

Red K Pharmacal Co., Wilmington, proprietary medicines, $2,500,000. Colonial Charter Co.

Illinois Medica Co., Wilmington, importers and exporters, $100,000. Colonial Charter Co.

Major Petroleum Co., New York, $150,000. U. S. Corporation Co.

Transcontinental Oil Co. of Colorado, Wilmington, acquire and develop; $100,000. Corporation Trust Co. of America.

Coleman-Nelson Corp., Wilmington, deal in crude oil, $1,000,000. Corporation Trust Co. of America.

Standard Plate Glass Corp., Wilmington, manufacturer, $16,000,000. Corporation Trust Co. of America.

Industrial Rotaltie, oil lands, $500,000; E. R. Bouase, E. Levinson, E. A. Naylor, New York. Registration & Incorporation Co.

American Wood Impregnation Corp., Wilmington, manufacture of chemicals, $500,000. Corporation Service Co.

Standard Agricultural Chemical Corp., Wilmington, Del., manufacture fertilizers. Corporation Trust Co. of America.

Pro-Ven Laboratories, Wilmington, powder perfumes, $500,000. Colonial Charter Co.

Newark Oil Corp., Wilmington, operate wells, $2,500. Corporation Service Co.

F. F. Dalley International Co., Wilmington, manufacture shoe polishes, $100,000. Corporation Trust Co. of America.

Foreman European Oil Corp., New York, gas $500,000. U. S. Corporation Co.

Acme Royalty and Producing Co., oils and gas, $150,000; R. D. Ellis, N. M. Bihm, H. F. Sanderson, Eldorado, Ark.; Delaware Registration & Ins. Co.

Cook Laboratories, Wilmington, chemical, toxin and physical, $2,500,000. Corporation Trust Co. of America.

Associated Drug Industries, New York, merchandise, $1,000,000. U. S. Corporation Co.

Marvel Paint Stores, $350,000; Matthew F. Keller, Walter J. Barrett, T. J. McCormick, Springfield, Ohio. Corporation Trust Co. of America.

Edna Wallace Hopper, Wilmington, manufacture toilet articles, $100,000. Corporation Trust Co. of America.

Capital Increases

American Cellulose & Chemical Manufacturing Co., Ltd., New York, $25,000,000 to $47,000,000 for taxation purposes.

Sinclair Crude Oil Purchasing Co., Chicago, $40,000,000 to $50,000,000.

Rose Asbestos Mining & Trading Co. to the Rose Asbestos Corpn., Lancaster, Pa., $75,000 to $300,000.

Technicolor, New York, 30,000 shares of no par value, to 400,000 shares—an increase in capitalization from $33,000,000 to $40,000,000. For taxation purposes, New York.

Petroleum Rights Corpn., New York, $1,300,000 to $5,300,000.

Clement Oil Co., Wilmington; $35,000 to $250,000.

Alcohol Fuel Corp. of New York, Wilmington; $1,000,0000 to $4,000,000. Colonial Charter Co.

Belmont Oil & Gas Co., $500,000 to $1,000,000.

Name Change

Crew Levick Co. to Cities Service Oil Co. Tulsa, Okla.

Florida

Indian River Fertilizer Co., Vero; $150,000; Howard F. Smith, C. E. Heald.

Indian River Fertilizer Co., Vero; $150,000.

Georgia

Carver Products Co., Atlanta, $125,000; Charles W. Wickersham, Ernest W. Thompson, George W. Carver; buy, sell and deal in formulae and patented products such as food, dyes, stains, paints and sundry products from sweet potato, peanut, pecan, okra, dandelion, etc.

Kentucky

Bluff Haven Oil & Gas Co., Glasgow; $30,000; Amos Roper, Charles Ammerman.

Boyd Oil Co., Bowling Green; $15,000; J. H. Boyd, O. F. Kelly and Owen Sharkey.

Somerset Refining Co., Catlettsburg; $50,000; T. H. Gillman, Owen Wheeler and George F. Gallup.

Bluff Haven Oil & Gas Co., Glasgow; $30,000; Amos A. Roper, Charles Ammerman and H. T. Ammerman.

Mountain Springs Oil Co., Newport, $200,000; John H. Schmidt, Henry Becker, H. J. Smith.

Capital Increase

Cumberland Drug Co., $10,000 to $20,000.

Maine

Frederick J. Stearns Co., Kittery; $25,000, to manufacture floor oils, polishes; clerk, Aaron B. Cole.

Maryland

Star Drug Manufacturing Co., Baltimore; $50,000; Samuel S. Horn, Henry Rhinehart.

Hubbard Fertilizer Co., Baltimore; $10,000; Wilbur W. Hubbard, Wesley D. Wilson.

Mate Kola Corpn., Baltimore, $300,000; Carl F. Hopfield, J. Heimer Wolf; manufacture syrups and beverages.

Massachusetts

Mirolite Products Co., Quincy; to manufacture "liquid celluloid under a secret process invented by Wm. H. Mirley" and to manufacture any other substance or article under any process, formula or invention of Wm. H. Mirley or any other person; $50,000 common stock, all to be issued for sole right to Wm. H. Mirley's secret process for liquid celluloid. Frank Murphy, Boston, president, $5,000 stock; Henry C. Waterman, Hanover, treasurer, $10,000; Calvin S. Tilden, Swampscott, clerk. Directors, the president, treasurer and Wm. H. Mirley, Everett, $30,000. Other stockholder, Alice A. Balfe, Boston, $5,000. Littlefield & Tilden, Boston, attorneys.

New England Filling Stations Co., Boston; chain of automobile service and filling stations; $100,000 preferred stock, 1,000 shares of common stock without par value. Laurence G. Tighe, Cambridge, president and treasurer; George G. Jones, Cambridge, clerk; directors, the officers and Llewellyn Howland, Brookline.

Burton Boston Brush Co., Cambridge; manufacturing; $100,000 preferred stock, 1,500 shares of common stock without par value. Philip E. Thayer, Brookline and Cambridge, president and treasurer, holding all of the common stock; John E. Peakes, Newton and Boston, clerk; directors, the officers and Herbert L. Norris, Newton and Boston. Dunbar, Nutter & McClennon, Boston, attorneys.

Seaboard Mercantile Co., Boston; "Kutol Miracle Powders and Creams," which have been produced by the Precision Metal Workers; $300,000 common stock. Glenn Haskell, New York city, president; David C. Nickerson, Leominster, vice-president; Hollis B. Wilcox, Boston, treasurer, holding $151,000 of stock; Alden James, Boston, clerk and attorney; directors, the officers and W. Morse Wilson, Worcester; N. Lincoln Green, Boston; Frank Price, Detroit, Mich.

Table of Contents

Program of Exposition Exercises.....iii
Directory of Exhibitors.....v
Description of Exhibits.....vii
Dye Demonstration.....xiii
Exhibitors and Advisors to Meet.....xiii
Purpose of the Exposition.....xiii
Diagrams of Floor Space.....xiv-xvi
Dyes and Other Coal-Tar Chemicals Imported at New York in August.....xvii
Organic Chemistry at A. C. S. Meeting....xviii
Fertilizer Chemistry at A. C. S. Meeting...xix
Medical Chemistry at A. C. S. Meeting....xix
Cellulose Chemistry at A. C. S. Meeting....xx
Leather Chemistry at A. C. S. Meeting....xx
Petroleum Chemistry at A. C. S. Meeting...xxi
Allan-Pfeiffer Receiver Asked.....xxi
Industrial Chemistry at A. C. S. Meeting..xxii
Neo-Salvarsan Duty Fixed on U. S. Value xxiii
Diethyl Sulphate as an Ethylating Agent xxiii
Dye Chemistry Notes.....xxiii
Recent Incorporations.....xxiii

Index to Advertisements

American Trona Corporation..... 10
Binney & Smith Co..... 12
Central of Georgia Railroad..... 10
Elmer & Amend..... 6
Fougera & Co., Inc., E..... 8
Knight, Maurice A..... 2
Magnus, Mabee & Reynard, Inc..... 6
Mathieson Alkali Works, Inc..... 4
Mutual Chemical Co. of America..... 1
Pfizer & Co., Chas..... 24
U. S. Industrial Chemical Co..... 5

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Camphor Refined

Phenolphthalein
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Minor Bismuth Preparations
Potassium Iodide, Crystals and Granulated
Iodine Resublimed
Iodoform
Minor Iodides
Chloroform
Potassium Citrate
Sodium Citrate
Tartar Emetic
Antimony Lactate Solution
Tannin

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Red Precipitate
White Precipitate
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